Varazdin Development and Entrepreneurship Agency
Faculty of Commercial and Business Sciences

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Davor Filipovic and Anita Goltnik Urnaut

Economic and Social Development

2nd International Scientific Conference
Book of Proceedings

Paris, 5th April, 2013

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Challenges of the Modern World - Contemporary Economy and Globalization

THE ROLE OF ICT ON CULTURAL HERITAGE TOURISM: A CASE STUDY

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ABSTRACT
The purpose of this study is to discuss the role of ICT in cultural heritage tourism through a case study of the Hiraizumi world heritage site in Japan that was registered in 2011. As it promotes tourism through the world heritage registration, Hiraizumi is operating on the major premise that it will safeguard its cultural heritage while also placing importance on developing systems for accepting a diverse range of tourists using the universal design perspective. When doing so there are limits to facility refurbishment and infrastructure development so the town focused its attention on support for information aspects, or in other words support using ICT. Going forward as individual travel becomes more mainstream the ways in which new value is created in Hiraizumi tourism are likely to include (1) transmission of the value of the cultural heritage in collaboration with researchers and (2) development of tourist areas in which excursions on foot are possible. We discuss the possibilities for utilization of ICT in these measures and the utility of the participatory design approach.

Keywords: Cultural heritage tourism, ICT strategy, Tourism information, Tourism promotion and cultural property protection, World Heritage

1   INTRODUCTION

In June 2011 the cultural heritage of Hiraizumi was registered as UNESCO world cultural heritage under the name "Hiraizumi—Temples, Gardens and Archaeological Sites Representing the Buddhist Pure Land," realizing an ardent wish of the town. The town had fought back after the nomination had been rejected in 2008 and overcame many obstacles to achieve registration including reducing the number of sites covered by the nomination from the initial nine sites to five sites (Chuson-ji, Motsu-ji, Kanjizaio-in Ato, Muryoko-in Ato, and Mt.Kinkeisan), so the excitement of the local people was all the greater when the registration was finally achieved. For Iwate Prefecture and all of the northeastern Japan suffered from the Tohoku earthquake and tsunami of 11 March 2011, the registration proved to be a ray of hope. Through registration as a World Heritage Site, various plans and operations were initiated to promote and vitalize tourism in Iwate prefecture and the Tohoku region centered around Hiraizumi. On the other hand, the gap between the inland areas of the relatively unaffected prefectures and the seriously damaged coastal areas, which still have not restored their facilities, continues unabated.

Hiraizumi is a well-preserved grouping of a wide variety of temples and gardens built on the basis of the Pure Land thought of Buddhism (Figure 1). The temples and gardens attempted to create an ideal world in our world, and developed in a uniquely Japanese way while receiving foreign influences. The expression of the ideal world at Hiraizumi is seen as being without parallel anywhere else. In order to register a site as a World Heritage site, it is necessary for the resource to have a "marked and universal value." In order to prove this, it is necessary to show that the site (1) corresponds to at least one evaluation standard among six stipulated by the Word Heritage Committee, (2) is authentic and complete, and (3) possesses an effective conservation administration system. Hiraizumi was evaluated in categories "interchange" and

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"association" among the six evaluation standards: masterpiece, interchange, testimony, example, landuse and association (http://www.pref.iwate.jp/~hp0907/english/index.html).

Together with the registration of the world heritage, the tourist guide system built through joint research by the town of Hiraizumi and the laboratory of the author commenced operation. Our laboratory is working on education and research related to a practical information system with the issue of community informatization as our theme, and this system was also created in response to a request from the town, which is facing the issue of how to handle the increase in tourists after world heritage registration. In this paper we discuss the role of ICT in cultural heritage tourism based on the case of the initiative undertaken by the author in Hiraizumi.

Figure 1: Hiraizumi world heritage site

2   WORLD HERITAGE REGISTRATION AND TOURISM PROMOTION

2.1   Tourist increases and universal design

In tourist areas there is growing emphasis on the universal design (UD) (http://www.design.ncsu.edu/cud/) or design-for-all approach which takes into account different kinds of people such as elderly people, people with disabilities, and foreigners. The factors behind this include the recognition both internationally and domestically of travel as a right belonging to all people, the aging society, the diversification of tourists and more small group tourism, and efforts to attract foreign tourists. Through laws and regulations concerning UD, the mobility environment for the handicapped and elderly was improved. Not only have areas that are regularly utilized with a high frequency been improved, but also non-everyday environments such as tour destinations are also being upgraded. However, tourism includes a wide variety of factors, and by linking them organically, tours with a high degree of satisfaction can be achieved. In UD, when advances in upgrading and improvements are made, increased demands appear. It is necessary to make improvements as they become possible with the goal of providing tourists with an even higher degree of satisfaction.

In the period from 2005 to 2007 the Hiraizumi region established the UD Tourist Areas Promotion Council and took measures for the UD Promotion Program in preparation for the 2008 world heritage registration. Handling the increase in tourists from both Japan and overseas emerged as one of the major issues but it became apparent that introducing UD would be difficult using only measures such as putting up signs in the locality, facility development, and the provision of guide staff, as a result of problems such as maintenance of the landscape and cost increases. Furthermore, with approaches centered on the distribution of print media, the trash problem is a concern. Therefore, expectations grew regarding introducing supplementary UD in which information is provided using the mobile phones of the tourists themselves, and introduction of a tourist guide system based on UD was

incorporated in the plans (Abe, Maita, Ooshida and Kano, 2007, pp. 247–258).

2.2   Environmental changes in the tourism industry
According to a report by a private market research company familiar with the conditions in the tourism industry, since the commencement of their survey in 2005 the market for travel with accommodation has been continuously declining in Japan. Over half of the market is taken up by middle aged and elderly people over fifty, while at the same time the decline in young tourists exceeds the decline in their population. Lack of interest in tourism is serious. The percent of package tours in 2009 was 12.5%, but in 2011 it had declined to 11%. The percent of individual tours is clearly rising. Furthermore, tourists do not come only to enjoy the famous world heritage sites; increasingly they seek tourism value for their total space and time, including their travel before and after touring the world heritage sites, meals, accommodation, and hands-on experiences.

Even Hiraizumi, which has achieved world heritage registration, must appropriately analyze and take measures to respond to these transformations in the tourism market of a "shift to individual tour" and a "shift from consumption of things to consumption of time." It is said that generally the increase in tourists due to the effect of world heritage registration levels out after a few years, but the tourism promotion implemented by local governments to date has mainly been confined to package travel measures, and has not constituted an approach to the individual tour market which accounts for 90% of tourism.

3   CURRENT STATUS OF ICT UTILIZATION IN HIRAIZUMI TOURISM
Firstly, we provide a commentary on the basic matters related to tourism information. The grouping axes of tourism information are (i) tourist behavior (beforehand, locally, afterwards), (ii) temporal aspects (static and dynamic), and (iii) spatial aspects (surfaces, lines, points), and the relationships between these forms of tourism information transmission and the media can be summarized as in Fig. 2. Next, we mentioned that it is easy to understand tour activity through a consumer activity model. Tourists pay attention to a particular tour destination and tour product. When they are interested they search for the details, make comparisons with similar destinations and products, and examine where they want to go. When they have decided that they want to go on a tour, they make plans, travel to the site, and enjoy it. After the tour they share their observations and experiences with family and friends, and disseminate them. This model is called AISCEAS after the initial letters of each of the activities (attention, interest, search, comparison, examination, action and share) (http://www.mlit.go.jp/sogoseisaku/region/kankojoho/).

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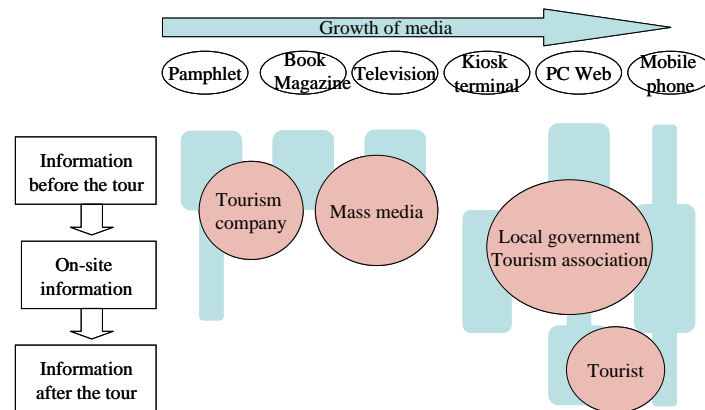
Figure 2: Tourism information transmission and media
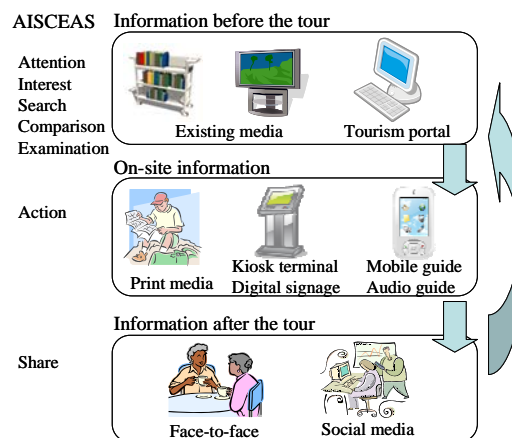
Figure 3: ICT utilization in Hiraizumi tourism

Following that, we summarized the ICT utilization situation regarding Hiraizumi tourism based on AISCEAS model (Fig.3). Information before the tour is provided by multiple government and tourism association portals (http://hiraizumi.or.jp/en/index.html), and on-site information is focused on print media complemented in part by the mobile/audio guide and digital signage. Information after the tour depends entirely on user promotion, and at present there is no organized capability making use of social media.

The distinctive feature of the tourist guide system is that it takes into consideration individual differences in tourism needs (differences in the pace of tourism, information acquisition methods, and the necessary information) based on the UD concept so it can meet the needs of diverse users with one mobile phone (Fig.4) (Ichikawa, Fukuoka, Ooshida, Kano and Abe, 2012, pp. 352–364). Information distribution at tourism spots combines the push type and the pull type. The context help handles the physical characteristics and position of the user, but the physical characteristics use a selection format from the screen, and the position information is compatible with GPS and QR codes.

Functions include commentary, route guidance and quizzes, and these are controlled by the UD support function, so information is provided taking into consideration user characteristics, for example only audio guidance is given to people with visual impairment. The audio

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guidance uses speech synthesis, and in the smart phone version the users themselves can change the speaker and change the speed of the audio.
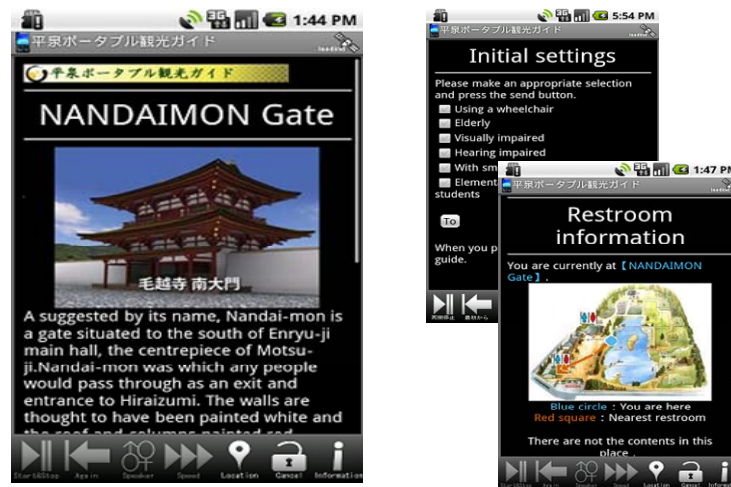
Figure 4: UD mobile guide system
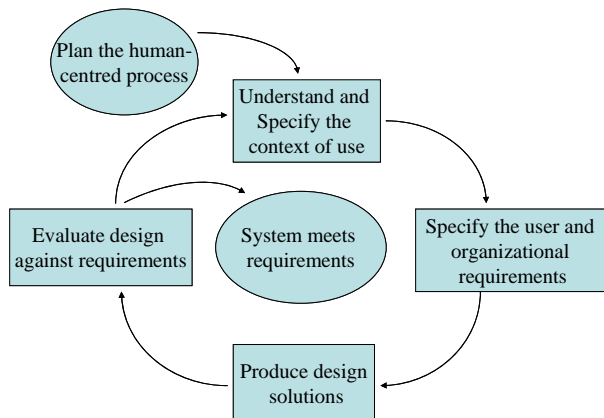
Figure 5: Human-centred design processes

Figure 6: Tourism workshop for participatory design

UD focuses on the spiral up approach in which improvements are made repeatedly based on user participation to make the service better and to disseminate it more widely. The distinctive feature of the planning, development and introduction of this system is that the participatory design approach was adopted in accordance with standard ISO 9241-210 (Figure 5). The designers carried out workshop many times involving walking around the tourism facilities and travel routes together with tourism monitors and local residents, and reflected the results in the system design (Figure 6).

4   NEW TOURISM VALUE CREATION AND THE ROLE OF ICT
Due to the widespread use of social media and smart phones tourism promotion using ICT will probably become a more realistic approach going forward, so based on this perception we discuss the creation of new value and the role of ICT in Hiraizumi tourism.

4.1   Visualization of heritage value through e-Heritage utilization
Most of the cultural heritage of Hiraizumi has been lost. Hiraizumi's value will not be

experienced by simply examining the extant remains. Their recreation and visualization through extended and composite reality technology is anticipated, not only in the academic study of cultural properties, but also in promoting tourism. The strongest demand is for reconstruction and visualization of archaeological sites using augmented reality/mixed reality (AR/MR) technologies. Researchers and technicians tend to focus on the pursuit of reality and historical accuracy but when using these technologies for tourism the care should be taken over the cost-effectiveness of system operation and content copyrights in particular.

If through collaboration between portal sites, the guide system and e-Heritage tourists are able to easily utilize the findings of humanities researchers as knowledge to enable them to decipher the value of the cultural heritage, then surely tourist satisfaction will increase. For example, most people do not know that "the ponds at temples in southeast Asia and India are all square, but the naturally-shaped pond such as at Motsu-ji temple were conceived of by the Japanese as representing the Pure Land, and the furthest limit of that evolution was achieved at Hiraizumi." There should be more dissemination of prior inductive information, not only on-site information.

4.2   Information support for encouraging local stays and excursions
At Hiraizumi up to now, tourists viewed Chuson-ji and Motsu-ji at a quick pace and passed on. I hope for an increase in repeat visits by having tourists stay over in the town with accommodations combined with a soothing experiential program to directly experience the Pure land through such means as preaching by the abbot of the temple. For that purpose, efforts to support time consumption locally by assembling landing-led local information while considering a media mix of existing media and ICT media, and transmitting the information meticulously will be necessary.

For example, it would be useful to present information for enjoying the landscape while walking around the cultural heritage spots to the tourists above each spot and the travel routes using smart phones and other devices. It may be a good idea to make an appeal to the handicapped and the elderly as an easily accessible tour destination focusing on the excellent commonality between Pure Land thought and universal design. In that case, by publishing local UD information beforehand regarding the accessibility of various places to wheelchairs or the availability of care giving facilities, it will be easy to match tourists with the local places. In addition, the inclusion of a function supporting the creation of an excursion schedule gives the traveler additional peace of mind on their journey.

4.3   Big data marketing for individual tour
In order to tie in with an expansion in the individual tour market through involvement with the preceding local stays and excursions, it is important to reevaluate local resources and features, and link with the activities of local residents. When so doing, it is critical that such local circumstances as trends in tourists using accommodations survey data on tour marketing, data on accommodations used according to areas from accommodation reservation sites, and so on be correctly grasped as data, analyzed, and utilized in making policies for promoting tourism. Further, as a new possibility in utilizing data, the approach of grasping general tour excursion trends and information access trends from data utilization trends in tourist guide systems using mobile phones, and linking that to environmental maintenance of tour sites to be enjoyed by walking, is very interesting from the point of view of community development.

5   CONCLUSION

In this paper we discussed the role of ICT in world heritage tourism through a case study of the Hiraizumi world heritage sites. As it promotes tourism through the world heritage registration, Hiraizumi is operating on the major premise that it will safeguard its tangible and intangible cultural heritage while also placing importance on developing systems for accepting a diverse range of tourists using the universal design perspective. For realizing this objective there is a limit to the hardware approach so the town focused its attention on support for information aspects, or in other words support using ICT. When examining the current status of ICT utilization in Hiraizumi tourism and the approach that would be best going forward we analyzed tourist behavior based on the AISCEAS model, a consumer behavior model. Moreover, going forward as individual travel becomes more mainstream the ways in which new value is created in Hiraizumi tourism are likely to include (1) transmission of the value of the cultural heritage in collaboration with humanities researchers and (2) development of tourist areas in which excursions on foot are possible and information transmission, etc., and we discussed the possibilities for utilization of ICT in these measures and the utility of the participatory design approach.

There is no shortcut to realizing these outcomes, and no change to the town's united efforts for continuous community development activities and tourism promotion, just as in the past. In future research we plan to further deepen our discussion about development of systems for accepting tourists and the best approach to information transmission, through analyses of the tourist excursion data of Hiraizumi.

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THE IMPACT OF TAX REFORMS ON GOVERNMENT REVENUE GENERATION IN NIGERIA

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ABSTRACT
The study examines the impact of Tax Reform Policy on Revenue generation of the Federal Government of Nigeria. The primary objective of this paper is to prepare a case study on tax policy reforms in Nigeria, with the specific objectives of examining the main tax reforms in the country, highlighting tax revenue profile and contributions of the three categories of taxes identified as personal, company and custom duties to the total revenue collection. The techniques of data analysis adopted for the empirical study were the Analysis of Variance Method and the Scheffe's Multiple Comparison techniques. In addition, the 'F' test of the analysis of the variance was used to test the hypothesis of no significant difference in the impact on personal, company and custom duty tax revenues of the Federal Government by each of the following tax reform policy objectives; enhancement of the principles of good tax system, improvement in the tax administrative structure, removal of disincentives to tax compliance and promotion of investment opportunities. From the results, it was concluded that each of the tax reform policy objectives had significant impacts on the personal, company and custom duty tax revenues of the federal government of Nigeria. Scheffe's comparison test confirmed that tax revenues from both company and custom duty exceeded personal income tax. It was recommended that for improved tax revenue generation from pursuit of tax reform policy objectives, the training and employment of qualified tax personnel who will be adequately equipped with appropriate materials is necessary. Furthermore, the adoption of strategies for an effective and efficient tax reform alongside with harmonization of government industrial and stabilization polices with those of tax reforms.

Keywords: Revenue, Tax, Tax instruments and Administration, Tax reform

1 INTRODUCTION

Nigeria is a nation with federal political structure that adheres strictly to the same principles of fiscal regime and this system has serious implications on how the tax system is managed. It is characterized by unnecessary complex, distortion and largely inequitable taxation laws that have limited application in the formal sector that dominates the economy. Tax is an essential source of government revenue that defrays the expenditures incurred by government by making it mandatory on tax payers. Tax is a valuable instrument of public finance whose magnitude affects the level of economic activity of an economy and is utilized not only for raising revenue of government to finance its programmes but also regulates the direction of economic performance of the economy. A system of tax vary from one country to the other and because it is a socio/political and economic model representing society's social, political

and economic needs and aspiration at any given time, the Nigerian Tax System is dynamic and is continually changing to meet the needs of the constituents of the society.

Tax is a system of raising money from individual person or corporate body for the purposes of government developmental programmes. It is rather a compulsory contribution imposed by the government on tax payers in return to identifiable benefit of living in a relatively educated, healthy and safe society. Though tax are imposed to regulate the production of certain goods and services, protection of infant or certain key industries as well as means of curbing inflation and meeting up the operational costs of governance. Taxes in Nigeria are imposed to regulate certain economic activities such as to influence economic activities in the country, bridge the inequality gap between the rich and the poor, to curtail consumption of undesirable goods and services, to correct a country's balance of payment and tax is used to attract investors.

In an attempt to realize these and other tax objectives, government encompasses the different types of taxes such as "Pay As You Earn, (PAYE), Value added tax (VAT), Excise duties etc and this paper is on tax Reform policy Objectives of the Federal Government of Nigeria (FGN) and its Impact on Tax Revenues generated.

Statement of the Problem
Many years after the major tax reforms in Nigeria, there has been mounting criticisms over its inability to realize the objectives towards which it was focused. Serious concern has been expressed over the increasing cost of tax administration of the Federal Government of Nigeria in relation to the tax revenue collections as evidenced scholars. This is an indication of high level of inefficiency in the tax operations of the country, which is contrary to the principles of taxation enunciated by Adam Smith. Besides, in contention is whether the objectives of equity, promotion of a viable industrial climate, the reduced tax rate structure, widening of the tax base have resulted in an increase in the tax revenue and it is designed to realize economic stabilization and development and the prevailing distortions in the tax system have jeopardized some of the purpose of the Nigerian tax reform agenda resulting into acrimony within the system.

Objectives of the Study
The main objective of this paper is to assess the impact of tax reforms on revenue generation of the Federal Government of Nigeria. Specific objectives are to;
- identify the tax reform policy instrument objectives of the federal government of Nigeria.
- evaluate with the use of model characterizing the behavior of tax revenue generated from tax reform instrument objectives for the purpose of determining their viability.
- examine the impact of the reforms of the federal government of Nigeria on tax revenues from direct and indirect taxes.

Hypotheses
Ho$_1$: There is no significant difference in the impact which the pursuit of tax reform policy instrument of enhancement of the principles of a good tax system exert on revenues collected by the federal government of Nigeria.

Ho$_2$: There is no significant difference in the impacts, which the pursuit of tax reform policy instrument of improvement of tax administrative machinery exert on revenues

collected from the different forms of taxes [personal, company and custom duty] by the federal government of Nigeria.

Ho3: There is no significant difference in the impacts which the pursuit of tax reform policy instrument on the removal of disincentives to tax payment exert on revenue collected from the different form of taxes [personal, company and custom duty] by the Federal Government of Nigeria.

Ho4: There on significant difference in the impact which the pursuits of tax reform policy instrument of promotion of investment opportunities exert on revenues collected from the different forms of taxes (personal, company and custom duty) by the Federal Government of Nigeria

Ho5: There is no significant different between the impacts which the pursuit of tax reform policy instrument of the Federal Government of Nigeria exert on direct and indirect tax revenues.

Conceptual framework and Review

This section examines the literature on the impact of Tax Reforms policy on Revenue generation of the Federal Government of Nigeria. The federal government had taken far-reaching steps aimed at reforming the nation's tax system before the pre-2002 reform efforts. Among these are: The 1978 Task Force on Tax administration headed by Alhaji Shehu Musa. The major thrusts of the report of the task force are: Introduction of the withholding Tax (WHT) regime, Imposition of 10% special levy on Bank's excess profits and imposition of 21 or 22 percent turnover on building and construction companies. The 1992 Study Group (SG) on Nigeria Tax system and system and administration headed by Professor Emmanuel Edozien, recommended the establishment of Federal Inland Revenue Service (FIRS) as the operational arm of Federal Board Inland Revenue (FBIR) and setting up of Revenue services at the tiers of State and local governments. The 1992 study Group (SG) on Indirect Taxation headed by Dr. Sylvester Ugoh recommended a policy shift from direct taxation to indirect or consumption, now referred to as Value Added Tax (VAT).

The current reform process (improvement or changes) commenced on August 6, 2002, after series of proposals forwarded by individuals, business class, and academia and tax experts to the Federal Ministry of Finance. A Study Group was eventually inaugurated to examine the system and make appropriate recommendations to the government on ways to entrench a better tax policy and improve tax administration in the country. After thorough appraisal of the technical issues evolved in the implementation of its far-reaching recommendations, the Group also suggested a tax environment where tax payer is registered as the "king" and a tax system with a "human face" as a strategic option of achieving the broad policy of its sundry recommendations. The study group submitted its report in July 2003. A private sector driven-group was constituted on January 12, 2004 and was fundamentally based on the issues covered by the study group's report of 2003. The Working Group was mandated in its terms of reference to critically evaluate the recommendations of the study group and propose prioritized set of strategies whose implementation would give effects to reform of the Nigerian tax system, which were grouped into short term, medium term and long term.

Both Groups addressed macro and micro issues in tax policy and administration. Among the macro issues discussed were the drafting of a National Tax Policy, Taxation and Federalism, Tax incentives and Tax administration generally.

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Reasons for Tax Reforms in Nigeria

The Study Group (SG) and Working Group (WG) recommendations and subsequent evaluations saw the need for more inputs from stakeholders in the nation's tax system, hence the convening of the 1st National Tax Retreat, tagged "Tax Reform and Democracy" held in Lagos from 22-24 August, 2005. Stakeholders agreed at the end of the retreat that the following reasons were not only expedient but necessary for the Nigerian tax system:

- Efficient and effective tax administration
- Stimulate the non-oil sector of the economy
- To resolve contentious issues in tax administration
- Redistribute wealth and entrench a more equitable tax system
- Capacity building for administrators and tax payers
- Centralization of revenue agency and computerization reduce effective tax rates simplify tax regime.
- Develop a tax policy for Nigeria.

Other reasons for tax reforms objectives include:

- To diminish the distortions in private savings and investment caused by taxation, by improving its transparency and predictability and shifting its incidence towards expenditure rather than income,
- To achieve greater flexibility so that development expenditure can be maintained in the face of fluctuations in oil revenue, by broadening the statutory base for taxation and its effective coverage,
- To consolidate and modernize the tax system in order to provide the basis for strong revenue growth and flexible fiscal management.

The theoretical underpinning of tax reform is found in the theory of optimal taxation. The work of Newbery and Stern (1987) has been described by Thirsk (1997) as perhaps the best illustration of the modern theory of tax reform. The modern theory of tax reform analyses tax reform within the normative framework provided by the theory of optimal taxation. Given a government revenue objective, an optimal tax reform seeks to maximize an explicit social welfare function that balances vertical equity gains against tax-induced losses in the efficiency of resource allocation. Tax reform revolves around a notion of some movement away from a given state of tax structure, administration or both. Theoretical exposition of optimal taxation normally begins with a set of fundamental assumptions. One of these assumptions is that production takes place in firms under competitive conditions; with profits distributed to consumers. The other fundamental assumptions are that there are no externalities, and that the price-taking consumers maximize utility. Yet another assumption that is of importance relates to the tax instrument under consideration. In case it is commodity tax, it is assumed that all goods can be taxed while under income tax, it is assumed that income can be observed perfectly.

During the year (1991), a committee was set up by the Federal Government to review the nation's tax systems and make appropriate recommendations. One vital recommendation of the committee was the need to introduce value-added tax (VAT). The value-added tax since its inception, has in fact been achieving the objectives of transferring tax incidence to expenditure as most previously untaxed expenditure items have been subject to value-added tax. The tax has also broadened the revenue base of the government as it ranks second to import duties among indirect taxes and it rank third in the scheme of direct and indirect taxes.

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Tax Reforms Policy Instruments Objective

- Provision of qualified personnel to handle all tax matters in Federal, State and Local government levels.
- Use of Tax Consultants to collect Revenues from government ministries and agencies
- Provision of adequate equipments assets and machinery
  - Functional Vehicles to enhance movement of tax officials and other personnel from one direction to the other for easy execution of duties
  - Provision of computers, machinery and other equipment
    - Provision of office accommodation, instead of using rented offices for tax duties.
    - Training and re-training of tax personnel and/or staff in tax offices, workshops, seminars etc.
    - Enhancing the use of labour-intensive production techniques
  - Renovation of all lapidated FIRS office building

Some Economic Effects of Taxation

The emphasis on tax as a way of raising revenue later broadened into the use of tax as a macro economic instrument for attainment of economic stabilization goals which according to the view of Peacock and Shaw (1971) include; Attainment of full employment, increase in national output levels, promotion of price stability and achieving a balance in the balance of payment. Begg et al. (1994) and Balami (2006), posit that economy can be regulated with view to increase or decrease the level of aggregate demand or output through the use of tax as a fiscal policy measure. Thus in the national income /output determination model which presents output measure by Gross domestic Product (GDP) as GDP = C + I + G + (X - M) taxation plays a major role.

Where: C = Consumption Expenditure, I = Investment Expenditure, G = Government Expenditure, X = Exports, M = Imports, (X-M) = Net export

While the left hand side of the equation (GDP) is the supply or output side and the right hand side constitute the demand side of the economy with the individual constituents C, I, G (X – M) as component of aggregate demand (AD). The summation of these components is referred to as aggregate demand that is, AD = C + I + G + (X-M).

Tax can, therefore, be used as an instrument of fiscal policy by which is meant government decision to change the level of government revenue (tax), expenditure or both (Danbury and McDougall, 1980) to influence the economy. In this way tax as an element of fiscal policy becomes a demand management tool which fiscal policy is as it is used to control the level of aggregate demand since it affects the consumption expenditure.

2 METHODOLOGY

In carrying out this study, the following techniques were adopted in analyzing the data collected. Analysis of Variance: This is used to break down the total variation of a dependent variable into different additive components due to various factor levels of an independent variable (source of variation). 'F' Test: This is used to test significance of the different levels of a factor (independent variable) on a dependent variable (in this study it is the tax collections). The 'F' test was used to conduct test on hypotheses (1) to (4) in this study. Scheffer's Multiple Comparison Methods: This is used to compare contrast in typical analysis of the variance problems intended to show how greater or lesser certain variables are in relation to other. In this study, it will be used to test hypothesis 5. **Scheffer' confidence interval:** This indicated the range within which the true value of the contrast will lie at a

specified probability. It can be used as a mutually complementary approach to hypothesis testing involving test of significance.

3   RESULTS, DISCUSSIONS AND FINDINGS

For the test based on 'F' distribution statistic like the 'F' ratio in the analysis of variance and Scheffer's test ratio stated that we reject the null hypothesis (H_o) and accept the alternative hypothesis (H_1) if the computed value 'F' of Scheffer's test ratios exceed the critical value of 'F' at the specified level of significance and degree of freedom, otherwise we accept alternative hypothesis. With respect to the confidence interval for the Scheffer's multiple comparison methods for the contrast of mean decision rule is to accept the null hypothesis (H_o) and reject the alternative hypothesis (H_1) if the null hypothesized value of the contrast (i.e $\psi = 0$) falls within the confidence limit.

In hypothesis (1), the computed 'F' statistic for testing the significance of the impact, which the policy variables of tax reforms such as efficient tax system and equitable tax structure exert on revenues of the Federal Government of Nigeria, indicated 8.2549 and 8.0579 respectively. Both computed 'F' statistic exceed the critical value of 'F' at 0.05 level of significance using 2 and 97 degree of freedom for V_1 and V_2 respectively i.e. 3.957, we reject the null hypotheses and accept the alternative hypothesis. **The decision is that the impact, which the tax reform policy instruments of enhancement of the principles of a good tax system exert on government revenues under personal, company and customs duty taxes, is significantly different.**

Hypothesis (2), the computed 'F' statistic for the testing the significance of the impact which the policy variables of tax reforms such as removal of distortions, expansion of revenue base and ensuring sufficient flexibility exert on revenues of the Federal Government of Nigeria produced 8.0284, 4.3153 and 535.55 respectively. Since all the computed 'F' statistic each exceeded the critical value of 'F' at 0.05 level of significance using 2 and 97 degree of freedom for V_1 and V_2 respectively i.e. 3.957. We reject the null hypothesis and accept the alternative hypothesis. Thus, the decision is **that the impact, which the tax reform policy instruments of improvement of tax administrative machinery exert on government revenues under personal, company and customs duty taxes, is significantly different**. While the computed 'F' statistic for testing the significance of the impact, which the policy variables of tax reforms such as entrenchment of reduced tax rate regime and tax payment compliance exert on revenues of the Federal Government of Nigeria, produced 6.8413 and 4.5247 respectively. Both computed 'F' statistic exceeded the critical value of 'F' at 0.05 level of significance using 2 and 97 degree of freedom for V_1 and V_2 respectively i.e 3.957, we reject the null hypothesis and accept the alternative hypothesis. Consequently, the decision is **that the impact, which the tax reform policy instruments of removal of disincentives to tax payment exert on government revenues under personal, company and customs duty taxes, is significantly different**.

The computed 'F' statistic for testing significance of the impact which the policy variables of tax reforms such as fair allocation of savings to investments, attraction of foreign capital and prevention of capital flight exert on revenues of the Federal Government of Nigeria produced 18.9116, 21.3620 and 17.4158 respectively. Hence the computed 'F' statistic each exceeded the critical value of 'F' at 0.05 level of significance using 2 and 97 degree of freedom for V_1 and V_2 respectively i.e. 3.957. As a result, we reject the null hypothesis and accept the alternative hypothesis. The decision therefore, is **that the impact which the tax reform**

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policy instruments of promotion of investment opportunities exert on government revenues under personal, company and customs duty taxes differs significantly. In hypothesis (5), all the computed Scheffee's test ratio for testing the significance of the contrast of mean involving the impact of tax reforms on revenues from both personal and company taxes when compared with customs duty revenues of the Federal Government on each of the policy variables of tax reforms **analysis N0 (6) to No. (15) in table 2.1 (Data or Table summary)** exceeded the critical value of 'F' (1-0.05); df: 2,97 which is 3.957. Thus, the decision is **that there is a significant difference between the mean impact tax reforms on both revenues from personal and company taxes and those of customs duty**. This decision is also the same when the confidence interval of Scheffee's multiple comparisons is used as a complementary approach to hypothesis testing. The reason is that in each of the intervals constructed as shown in the results the null hypothesized value of the contrast (ψ) i.e 0 $>$ fell outside each confidence interval. The result states that direct and indirect tax revenue collections are similar in the pursuit of tax reform policy instruments of the Federal Government of Nigeria?

Table 1: Analysis of Variance (ANOVA)

Source of Variation	Sum of squares	Degrees of Freedom	Mean Square (MS)	'F' Ratio
	(SS)	(DF)	MS=SS/DF	(MSB/MSW)
Between the means	6,174.27	2	3,087.14	6.53
Within the means	12,768.62	27	472.91	
Total	**18,942.89**	**29**		

The result is reject Ho if computed 'F' test > critical value of 'F' otherwise accept. The computed 'F' test statistic (=6.53) exceeded the critical value of 'F' $_{(0.05, \ df \ 2,27)}$ (ie. 3.35), therefore, we reject the null hypothesis (h_o) and accept the alternative hypothesis (H_1) that the mean revenue collections of the taxes as affected by the tax policy reform are significantly different thus the judgment of the officials are correct.

Findings from the data analysis unveiled important facts embedded in the research data. It was discovered that the pursuit of each tax reform policy objective had significantly different impacts on tax revenue generations of the federal government of Nigeria on personal, company and customs duties. The realization that each categories of tax such as personal, company and customs duties, as target of the tax reform policy objective, earned different levels of tax revenue was confirmed from the various hypotheses tested. This gave the indication that the different administration structures as established under the tax code through which assessment and collection machineries for tax are made possible have different capabilities. Also, explaining the difference in the revenue generation abilities in the different categories of tax is the income and expenditure patterns upon which tax liabilities are based. These patterns are mostly influenced by the macroeconomic environment prevalent in the economy. Thus, in period contraction (expansionary) stabilization policy decisions aggregate spending in the economy are reduced (increased) and this accordingly affect indirect taxes such as customs duties. It was additionally discovered that the mean tax revenue generation from both company and customs duties were higher than personal income tax revenue collections, and are therefore recommended as confirmed from analysis using scheffe's comparison methods.

4   CONCLUSION

This study examined the relationship between tax reforms and revenue generation of the Federal government. It goes further to examine whether tax reforms on various taxes- petroleum profit tax, companies income tax, personal income tax, value added tax, education tax and customs and excise duties and others affect the revenues generated by the federal government. It became obvious from the findings that the pursuit of tax reform policy objectives concerning enhancement of a good tax system, improvement in general tax administrative machinery, removal of disincentives to tax compliance and promotion of investment opportunities increase tax revenues. Besides, it revealed that tax reform policy objectives exert significantly different impacts on tax revenues from the various taxes sources but there are still set backs militating against increased receipts of tax revenues to Nigerian Government among these are:

- Lack of necessary communication technology equipment in the area of information processing, storage and retrieval of data, which would facilitate tax administration in the country.
- Government's inability to provide such working tools have made the work of processing huge volumes of data by manual effort cumbersome and often resulting in tremendous work accumulation.
- The gross inadequacy of well trained staff in tax matters have also contributed to the problem of short falls in revenue projections of the federal government of Nigeria.
- The shortages in both manpower and equipment needs have resulted in the imbalance in capabilities of the different administrative structures for tax assessment and collection machineries.
- Additionally, the inconsistencies in government policies affect tax revenue collections. For instance, while tax policies may be favourable for investments, industrial and other stabilization policy measures may not.
- Tax reforms are not regularly assessed to determine this level of success, ascertain strengths and weaknesses in tax organization and examine the environment in order to articulate better reform strategies.

5   RECOMMENDATIONS

The Federal Government of Nigeria needs improved tax revenue collections in order to satisfy its needs, provide social tax receipts from personal, company, petroleum and custom duty taxes should incorporate the following:

i.   Enhancement of principles of a good tax system as identified by Adam Smith and confirmed by this study.
ii. Improvement in the administrative machinery of taxes through removal of distortions and expansion of the tax base.
iii. Removal of disincentives to tax compliance by lowering the rate regime.
iv. Promotion of investment opportunities by ensuring corrupt-free and efficient administrative machinery with personnel who are adequately trained, well-equipped and motivated.
v.   Tax administration machinery should have an effective redress and refund system so that disputes can be settled easily and corruption checked
vi. Contrary to the erstwhile practice of practice of obsolete tax laws and rates, there should be a continuing review of tax-related issue to align these macroeconomic targets for promoting efficient fiscal policy.
vii. Proper education and training of tax officials along with provision of necessary infrastructure and equipment to carry out their duties is necessary.

viii. Adequate number of qualified tax officials should be employed as it is the gross insufficiency of qualified manpower and equipment that is responsible for contracting tax duties to external consultants at huge costs which defeats the idea of economy as a tax principle and

ix. finally, there should be harmony in the objectives of tax reforms and other industrial and stabilization policies. Furthermore, strategies of tax reforms should be properly articulated for better results.

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DESPERATE DISEASES REQUIRE DESPERATE REMEDIES: NEW PRODUCTION UNITS FOR BOOSTER THE ECONOMIC AND SOCIAL DEVELOPMENT IN THE CHAD

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ABSTRACT
Since its entry in the independence in 1960, Chad elaborated and implemented several national plans of economic and social development. The global objective declared by these plans and programs was always the improvement of the living conditions of the population. This one should pass by the development of the sector agro-sylvo-pastoral which occupies about 80 % of the Chadian population. The creation of the socioeconomic infrastructures allowing the internal and outside opening up of the country, the development of the human resources to increase the efficiency, etc. The realization of these programs should be translated concretely by a better access to the educational services, of health, hygiene, the drinking water, in the food safety, etc. The State is so substituted for the private almost non existent to take the relay of the activities of production has been organized by the colonization. Numerous public and para-public enterprises had widely dominated the modern sector. They had easy access to the credit with the downstream of the State. When they tempted towards the bankruptcy, they benefited from particular subsidies on behalf of the metropolis. The balance assessment of this policy of state control of production units has proved globally negative: bad performance of companies because of the lack of financial autonomy, a plethoric number and an oppressive supervision in the management. To protect the big balances, the State realized it will during a Round Table with the financiers on the "promotion of the private sector" in 1992. This idea was confirmed by the sovereign national conference in 1993. Also, with the globalization of the economy and the liberalization of the State disengaged from certain production units to play the role of regulator, training and realization of big works of social infrastructures and supervision of the management, etc. In spite of this obvious will on behalf of authorities, we noticed an increasing impoverishment of the population during four decades. The socioeconomic indicators were among the lowest as in many countries of Sub-Saharan Africa. To answer these concerns, the Chadian State made again a commitment to create or rehabilitate the new production units, such us Oil Company of Doba and Djarmaya, Juice Company of Doba, Cement Company of Boaré, etc. However, the question would be to know if the errors of past were corrected with this new give? What

Chadians are saying about these new companies? This paper suggests answering these questions by making current inventory fixtures of some of these new production units.

Keywords: Chad, Impoverishment, Population, Productions, Units

1 INTRODUCTION

The omnipresence of the public sector has for origin Europe. Indeed, the European public sector goes back to the second half of the XIX century (Bizaguet, 1992). One of the most determining motives for the creation of public enterprises was the stimulation of the new activities for the war periods. During the First World War (1914–1918), States, for reasons essentially of national defense, had been led to take in charge important sectors of the economic life (manufacturing of armament, supplies of foods to the stricken populations, etc. From this date, they are going to pursue their interventions in the economy with a steady intensity. That is why will appear industrial and commercial public institutions, semipublic companies.

The economic crisis of 1929 also entailed an extension of the European public sector (Bizaguet, 1992). The economic development required the State's intervention, supported by a vast protectionism and often, a substantial role of the public sector in the field of the production, finances and foreign trade. In Great Britain for example, under the Labor Government of the Party, were nationalized the bank of England, the coals, the electricity, the ground transport, the gas and the steel industry (Altengar Traoubal, 2003). This economic revolution affected the African continent after the waves of the independences of 1960.

So, from 1960, year of its entry in the independence, Chad in like other countries of the African continent, opted for a development policy of the productive system. The objective of this policy of the government of that time was the control of the strategic variables and the accumulation of the resources for the benefit of the State to begin the economic development in general.

The State so substituted itself for the private almost non-existent to take over from activities of production organized by the colonization. Numerous public or Para-public enterprises had widely dominated the modern sector. They had easy access to the credit with the approval of the State. When they aimed towards the bankruptcy, they benefited from subsidies on behalf of the metropolis.

The balance sheet of this policy of State control of companies was realized by the government at the first hours of independence, had proved globally negative: bad performance of companies because of the lack of financial autonomy, a plethoric staff and an oppressive supervision in the management, etc. To protect the big balances in the economy, the government launched in the process of withdrawal presented as an absolute obliged passage. It is in this context that in April, 1992, the State realized its will during a Round Table (Rititingar, 2008) with its partners on the *"promotion of private sector"*. The idea of this Round Table was confirmed by the Sovereign National Conference on 1993.

With the globalization of the economy, the liberalization of the productive sector became a paradigm. State has to leave the open field with the private to dedicate itself more to its role of regulator, training, realization of big works of social infrastructures. It is the policy of the Program of Structural Adjustment. For authorities, this policy should allow the African

companies generally and Chadian in particular, to get up better. From then on, this conception allowed the adoption of the little careful policies: erroneous choice of companies to be privatized and buyers, liquidation of certain companies, etc.

In spite of these efforts to set up a dynamic economic policy to strengthen the social development, we found ourselves in the same situation. In fact, seen the opacity of the Chadian governance, we are reduced to make certain number of reports: poverty of the big mass, the youth unemployment, the inflation (Tonmadjal Nantourmbaye, 1998), etc. From then on, to remedy this delay of the economic and social development, the solution was to emphasize on natural resources not exploited. This vision led to the works of the exploitation of the oil of Doba; in the south of the country in 2003 financed by the World Bank at the level of 4, 2 billion dollars with the construction of an oil pipeline of 1070 km long up to the Cameroonian port of Kribi, the mini refinery of Djarmaya in 2011, financed by 60 % China and 40% by Chadian government (http://tchadonline.com/?p=113856), cement works of Baoré in 2012, financed always by the China at the level of 70 million euros (http://www.leblogfinance.com/2012/02/tchad-la-chine-finance-une-usine-de-ciments-de-70m -deuros.html), the factory of manufacturing of juice of Doba, the list is not exhaustive.

However, the question that we can arise is the one to know if we reached the objectives with this new policy? To answer this concern, we shall hold for this work two of these new production units namely the cement industry of Baoré and the mini – oil production of Djarmaya.

1.1   Methods and Materials
Series of documents from journalistic statements and political speeches, etc. are regularly published on social and economic development of Chad country this day. Forums, Symposium and NGO's (Non-Governmental Organization) reports are available in web sites on Chadian government's commitment to give better condition of living to its people. This position has brought the implementation of many units of production. The works realized on these units have been consulted.

Besides, we interviewed person resources, including the workers of these units. They reacted to the structured and opened questionnaires. We hope that the questions raised in the present report have risen to inquiries deepened within the persons in charge of the management of these units, and they understand how the objective of exploiting these units has to be an advantage for the local populations in general and Chadian State in particular. So that to promote social and economic development in sustainable manner.

1.2   Results and Discussion
The social and economic development of Chad and its impact on Chadians constitute an awkward debate today. It is thus a problem of a sustainable development which we need to investigate various sources of information to make a concise and precise contribution. This means adopting different approaches. That is why, our study has brought a historic evaluation; under a multidisciplinary angle which helps to understand the management of different resources, since the independence of this country through different policies of development, before the implementation of new units of production. These various policies of development have been always considered as an absolute solution to the development of societies but, are sometime deceitful according to certain results.

It is to understand these issues that this study has tried to contribute to the debate. Our question is to know if we give the priority to the local populations by implementing these units? Did we reach the objectives with these new policies of development? What are the impacts of these products on Chadian people? These questions motivated us to exploit different sources of data to achieve this paper, which we hope may not bring all the solutions to the social and economic issues of Chad but, it is whenever a living scientific contribution to the debate.

2 BRIEF HISTORY OF THE NATIONALIZATION AND PRIVATIZATION OF COMPANIES IN CHAD

2.1 Nationalization's context
The concept of nationalization can so mean, in this context, the implicit transfer by colonial powers of the economic units introduced by the colonizers to the new independent governments. So the policies of nationalization then touched most of the African States after the formal independences. According to Alténgar, this economic revolution is conceived in European countries as, "the total and compulsory appropriation by authorities, by repurchasing to the former shareholders or seizure of the professional sectors of companies managed completely by the private sector" (Altengar Traoubal, 2003).

With regard to this definition, there is something wrong with African continent. It is likely in republic of the Chad. Because many companies' shares nationalized are still held by French companies (Rititingar, 2008). Below, we describe in a brief way the different nationalized production units.

2.1.1 From the sosutchad to sonasut
The Sugar Company of the Chad was created in 1965 by the Chadian government and the group SOMDIAA (Organization of Management and Development of the Food-processing industry) and implanted in Banda in 25 km of the city Sarh in the South of the Chad with the headquarter office in N'Djamena the capital.

In 1977, the SOSUTCHAD developed and took the naming of the SONASUT (Sugar National Company of the Chad). It was structured in a following way (Ateib and Djimtebaye, 2011):
− The Department of Production;
− The Department of Material Park;
− The Technical Department;
− The Department of Human Resources;
− The Department of Supply;
− The Department of Finance and Administration.

In 2000, the company was privatized and takes the name of CST (Sugar Company of Chad).

2.1.2 From the cotton franc to cotton chad
Cotton Chad, or cotton Company of the Chad was created in 1972, held 75 % by the Chadian State, 19 % by Dagris, and 6 % by local banks (Bertrand, 1994), which has for mission to supply tools and fertilizer to the planters and to market the cotton-seed. The cotton was already known by populations of Chad before the colonization. Local Populations spun and already weaved the cotton, in particular of narrow cotton bands serving as G-string. In rappel,

the cotton was introduced in Africa by the Arabs and the Portuguese. In 1918, the Belgians begin the industrial crop of the cotton, putting the foundations of the economy of the Chad.

However, the creation of an organized sector of cotton in Chad goes back to French's presence, but does not intervene at once. In 1910, Oubangui- Chari became one of the territories of French Equatorial Africa, with Chad, Middle Congo (now Congo Brazzaville) and Gabon. The first official tests of cotton production were tempted by French people on 1921 and turned out decisive. On 1926, the companies of cotton production settled down in Oubangui- Chari. The campaign of 1927 marked in this territory the real departure of production of this product, encouraged by General French Governor of that period Rapael Antonetti and accompanied by the development of some factories of production in 1928.

Later, during the creation of French Company of Development of Textiles, (CFDT; French Trade Union), a convention imposed the modernization of the factories of seed. A total of 25 factories were settled: Lere, Pala, Gounou-Gaya, Bongor, Moundou, Doba, Gore, Guidari, Kelo, Fort- Chambault (now Sarh), Moissala, Kyabe, Korbol, Am-Tinan, Beinamar, Koumra Bousso, etc. (Armi, 2003).

From 1952 to 1955, the investments realized by colonizers in the mechanisms of pneumatic inhalation and in the creation of waters fed by mechanical pumps, allow to reduce the operations of handling, during the unloading of the trucks of cotton- seed, the canvas covering and the hooping of bullets, what reduces the number of the hired seasonal labors and ends in decrease of factories. That is why we have now in Chad these factories below: Lere, Pala, Gounou-Gaya, Moundou, Doba, Kelo, Sarh, Kyabe and Koumra.

In the middle of 1970, authorities launched the "operation 750 000 tons". During the campaign of 1975–1975, more than 300 000 hectares are sowed by cotton and the production flirts with 175 000 tons. Then, surfaces are gradually divided in two returning to only 124 000 hectares sowed on 1986. After the armed confrontations of 1980s, the progressive return peace in the cotton region production, conjugated to the devaluation of African Franc Community and to the biggest autonomy given in 1993 in Cotton Chad for the fixation of purchase price of the cotton to the planters, allowed a strong increase of the cultivated surface, to reach the 386 300 hectares summit in 1997- 1998, during the most important campaign of the history of Cotton Chad: a total of 263 475 t of cotton seed were collected.

Moreover, the cotton is especially cultivated in the south of this country, in family exploitation, consisted of 5 to 6 farmers and of a surface generally from 1 to 2 hectares. Considered as a "white gold", the cotton was before 2003, one of the main pillars of Chadian economic, whom it gets 60% to 65% from its exports and also makes feed about tree millions of people.

It is subjected to a large number of fiscal receipts and taxes which are directly supported by her, is simply collected for the State. It is therefore, its contribution to the State's budget. Below, the evolution the board of some direct contribution of Cotton Chad to the State's budget.

Table 1: Direct contribution of Cotton Chad to the State's budget (Direction of Taxes and Indirect Rights, 2005, p. 30)

Years	2001	2002	2003	2004
State's Fiscal Receipts	43638	62119	76106	86105
Taxes by Cotton Chad	40061	4321	3562	3150
% Cotton Chad	9, 30	5, 50	4,68	3,01

The board above shows that the contribution of Cotton Chad to the State's fiscal receipts passes from 9, 3 % in 2001 to 3,01% in 2004.

As consequence of this situation, the tax system taken by the State gnaws at the margin of the producers' income.

The functions of Cotton Chad were socioeconomic. In fact, one of its tasks consists in buying the totality of the cotton granulate product by the farmers, to supply them credit, the agricultural products and to pay the cotton to the same price on the whole cotton zone (Rititingar, 2005). The second function is one of the industrial transformation of the cotton seed and the marketing of the fiber.

In this respect, Cotton Chad has to shell the cotton granulates and to sell the fiber and the seed which ensure from it. Finally, she is in charge of planning and has to, for that purpose, fit out and maintain the tracks of evacuations of the cotton seed.

However, this role was disputed and led authorities to a progressive withdrawal of the State on 1999 of the reform of the cotton sector and accomplished the privatization of the Cotton Chad on 2011 which took the name of "New Society".

Furthermore, Cotton Chad was until 2003, the second employer of the country after State with almost 3000 employees (Rititingar, 2005). The main zone of exportation of Chadian cotton is European Union and France in particular, Germany, Belgium, Portugal and Spain. This list of nationalization is not exhaustive: so we can quote the refrigerated slaughterhouses of Farcha, the Cyclo Chad and the Factories of the Cigarette of the Chad of Moundou, the Company of the Textiles Textile of Chad, etc.

2.2 The privatization of companies

The process of privatization engaged by Chad since 1992 affected practically all the public enterprises and Para- publics. Certain States' companies and public institutions were either liquidated, or privatized or restricted to be kept in the wallet of the State considering the

economic weight which they represent. All these companies belong to varied sectors of economy: Food- processing industry, transport, hotel business, banks, etc. The realization of the privatization of these companies was made in a progressive way:

2.2.1 The first step of privatization

Considering the stakes which present every company, the first stage of privatization passed from 1994 to 1997. It consisted in treating the companies that the social incidence seemed to be low and whom the private sector showed an interest for the resumption. In this process, the priority was given to the national private operators certainly, but they latter have no financial and technical capacity to develop the acquired companies among which most are in trouble.

State's participation in favor of most of the companies is situated between 15 to 20%. Financially, the first step of the program of the privatization brought about 1, 07 billion of Francs CFA to the treasury.

Table 2: First Companies Privvatized (Technical Commitee in Charge of Privatization of Companies in Chad, 2008, p. 22)

No	Entreprizes	Year	Activities	Nature of sale	Receipt for the benefit of the Treasury
1	SAPROVET	1994	Commercialization	Shares	21.004.061
2	MCT	1994	Manufacturing Cigar	Shares	3.0960.000
3	PHARMAT	1994	Distribution of pharmaceutical Products	Shares	31.906 000
4	STAR NATIONALE	1995	Commercialization	Shares	114.450.000
5	INT	1996	Publishing	Shares	96 856 560
6	SONAPA	1996	Commercialization	Shares	36 .120.000
7	SOTEC	1996	Careers	Shares	312.766.000
8	LNBTP	1996	Building	Contract of Management	40.000.000
9	BIEP	1996	Studies	Constitution in Society	40.000.000
10	ONHPV	1996	Hydraulic	Shares	345.100.000
	Total				1.069.062.621

2.2.2 The second step of the privatization

The second step of the privatization started in 1999 and concerning companies presenting a major interest for State. That is why State, for the reasons of economic and social order, expressed delayed the operation of these companies to make sure of their privatization. So the difficulties met by the national operators in the first step to develop the acquired companies brought State to change strategies of the priority granted to the national operators. This is the way companies privatized during the second step with exception of the

Refrigerated Slaughterhouse of Farcha were given up to national private operators. All the others were granted to foreign groups called otherwise "hard cores". The second step of privatization allowed mobilizing approximately 10, 6 billion of Franc CFA to the public treasury.

Table 3: Second Step of the Privatization (Technical Comitee in Charge of Privatization of Companies in Chad, 2008, p. 23)

No	Entreprizes	Year	Activities	Nature of salle	Receipt for the benefit of the Treasury
1	BDT	1999	Banks' Transactions	Shares	93240000
2	BTCD	1999	Banks' Transactions	Shares	1512 000 000
3	HOTEL DU CHARI	1999	Hotel	Business Contract of management	No reference
4	AFF	1999	Commercialization	Marketing Contract of management	60 000 000
5	STEE	2000	Supply water and electricity	Contract of concession	No redevance
6	SONASUT	2000	Sugar Production	Shares	2 257 000 000
7	CELTEL	2000	Telephony Cellular	Licence	1230 000 000
8	LIBERTIS	2000	Mobile phone	Licence	950 000 000
9	SNER	2002	Public works	Assets	1 425 000 000
10	HSA	2003	Commercialization	Assets	3 100 000 000

Besides these privatized companies, we may also mention the case of some companies liquidated.

2.2.3 The liquidation

They are reserved for companies non-strategic and which present no potential to the commercial and financial level. It is about companies totally overdrawn and difficult to straighten. They were totally liquidated. This operation (liquidation), consists in selling the asset of the company to discharge its liabilities and at best (in the best case) to generate additional resources for the State. According to one warned of the operation, the absence of an adequate legal framework and the insufficiency of assets to cover the liabilities, make difficult the operation of the privatization (Altengar Traoubal, 2003). This situation obliges the liquidators to leave chargeable to the State the checking liabilities.

It is the case of OFNAR, BATAL, BICIT, and SOTERA. The popularization of their latent liabilities of which has long time delayed, for the lack of financial resources. In spite of this situation, the liquidation of companies brought to the treasury a sum of 843 millions of franc CFA.

Below, the board shows of the liquidated companies.

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Table 4: The liquidated entreprizes (Technical Comitee in Charge of Privatization of Companies in Chad, 2008, p. 23)

No	Name	Statuts	Raison Sociale	Date of de liquidation	Benefit Brought to au Public Treasure
1	STT	SA	Manufacturing of Fabrics	1993	No reference
2	SOTERA	SEM	Commercialization	1990	No reference
3	SHT	EPIC	Hotel	1987	9 458 925
4	CSPC	EPIC	Cotton's regulation price	19992	No reference
5	CRPS	EPA	Sugar's regulation price	1994	No reference
6	OMVSD	Office	Rice development	1991	No reference
7	OFNAR	Office	Road maintenance	1994	135 529 200
8	OPIT	EPIC	Promotion of SMES/SMIS	1994	
9	OFCA	Office	Operation of careers	1989	585 000 000
10	SONACOT	EPIC	Commercialization	1986	113022 161
11	Fonds Pétrolier	EPA	Fuel's price regulation	1994	
12	BATAL	SEM	Banks' transaction	1994	
13	BICIT	SA	Banks' transaction	1994	
14	AIR Tchad	SA	Air transport	1999	
Total					843 009 926

It would be important to mention most of the companies liquidated before the implementation of the Technical Committee in charge of the disengagement of State from companies. Also, after the liquidation of the STT, the production tool (the factory) was put under cocoon. It is in 1986 that a company called "COTEX" Textiles Company of the Chad signed an agreement with State for the resumption of this tool. The terms of the contract not being respected, State broke it. At present, the factory was restructured by the project TEAM -9. Other companies are restructured.

2.2.3 The restructured companies and leave into state's wallet

They are companies whom the privatization does not justify itself for company or strategic names or regarding development. This category of companies are maintained or kept in the wallet of the State. Among them, the Autonomous Box of Amortization (CBA) was

transferred to the Ministry of Finances and the budget where she insures the debt servicing. The National office of the Posts (Post offices and Telecommunications of the Chad) (ONPT) split into two: the one in Chadian Company of the Posts and the Savings (STPE) and the other one in Company of the Telecommunications of the Chad (SOTELTCHAD). The National Box of Social Foresight (CNPS) and the National Box of the Pension of Chad (CNRT) benefited from a big study before restructured beings. The lists of the restructured companies are:

Table 5: The Restructured Entreprizes (Technical Comitee in Charge of Privatization of Companies in Chad, 2008, p. 24)

No	Name	Statuts	Social Raison
1	ONC	EPIC	Social Distribution
2	SODELAC	EPIC	Farming Development
3	LRV	EPIC	Veterinary Research
4	ONAMO	OFFICE	Centralization of emplyoment application
5	CNEAPAA	EPA	Artisanal teaching
6	ONDR	OFFICE	Rural Development
7	OACGV	OFFICE	Patronage Veterans
8	CAA	EPA	Redemption of public debt
9	CNPS	EPA	Social forsight
10	CNRT	EPA	Retirement
11	FIR	EPA	Rural Intervention
12	ONPT	OFFICE	Post Services

3   THE NEW PRODUCTION UNITS

Since July 2003, Chad entered into the club of Petroleum Exporting Country, with the starting of the oil pipeline Doba- Kribi. Since that date, several other production units were realized during five – years term (2006–2011) by authorities. This study will focus on two of them:

3.1   The cement factory of baoré

Vue partielle de la Cimenterie de Baoré (Ph. Arif A.M.)

Figure 1: Partial view of cement factory of Baoré (Arif, 2012)

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Situated in some 40 km of Pala, in the region of Mayo Western Kebbi, more exactly in the village of Bissi Keda, the factory of the cement of Baoré is endowed with ultra sophisticated equipments and with a long modern technology. The factory is in 8 km of the zone of extraction of limestone which is the raw material that must be of use to manufacturing of the cement.

Fruit of Chinese-Chadian cooperation, this project is realized by the Chinese company CAMCE, which capitalizes a robust experience on the subject. It is the big industrial complex which shelters at the same time the installations of the factory and the auxiliary works such as: the buildings of the synthetic office, the housing for the employees and the other equipments necessary for the production of cement.

In terms of capacity, the factory produces 700 tons a day. It is expected to produce 200.000 tons a year (http://www.infotchad.com/details.asp?item_id=2806&) and so within twenty years. The type of the cement produced is the one ordinary Portland that combines materials such as the limestone, the clay and the lateritic. The existence of these raw materials is certainly the main asset which the region of Mayo Western Kebbi for the setting-up of this factory arranges. Considering the lack of electricity in the region, the factory produces within it some electrical energy (an electric central of 19 megawatts) as well as some water by drilling for its needs. It is about the preferential loan of mocked it EXIM BANK (The Export Import Bank of China).

By inaugurating this economic jewel, President Deby was anxious to specify that the cement were started to solve the problems of the social housing environment, which his country faces. It is not intended for the export because it will be enough, eventually, to satisfy, hardly Chadians' needs. For that purpose, the price of bag in the factory exit was fixed to 4.200 franc CFA. This price does not have to exceed 6.500 Franc CFA, even if we have to include the transport costs there.

Figure 2: Cement made in Chad being loaded in Baoré (Brahma, 2012)

The unit is structured as below:
1. A Patronage Council of Administration;
2. General Director;
3. Director of Finance, Materials and Administrative;
4. Technical Director which included the service of production and workshops such as cooking matter, cement, dynamic, quarry, lab, room of ordering, parking service.

In terms of employment, the factory employed about 300 people (Maye Vaidjouma, 2012).

3.2 The refinery of Djarmaya

The refinery of Djarmaya, built by the Chinese and inaugurated during the summer, 2011 is held in 40% by Chadian State and 60% by CNPC (Chinese National Petroleum Company). It was planned that this refinery should shelter a power plant of a capacity 40MW to feed the factory and the city of N'Djamena.

In reminder, the factory is situated in approximately 40km in the North of the city of N'Djamena. It shelters the station of the collection and the waste water treatment. In a different way, the refinery presents four bulks which are:
1) A Unit of Atmospheric distribution;
2) A Unit of Catalytic cracking of the atmospheric residue;
3) A Unit of semi regeneration and the catalytic reforming;
4) A Unit of the hydro reforming of the diesel oil.

According to this concept, this refinery is divided into four sections:
1) A zone of the units of treatment;
2) A zone of transport and storage of oil;
3) A zone of the units of the auxiliary installations;
4) A zone for administration and housing.

4 IMPACT OF NEW PRODUCTION UNITS ON SOCIAL AND ECONOMIC DEVELOPMENT

Considered its painful past marked by various armed conflicts, the management of the public properties in Chad is always mitigated. As consequence, State is perceived as *"a box which is necessary to reach absolutely to draw from it what we need"* (Hazoume and Hazoume, 1998).

This position leads us to examine the impact of these new units on Chadian people. It comes to examine how these factories are functioning so that to impact social and economic development.

4.1 The criteria of appointment of the administrators into new companies.

4.1.1 The political interference

It always emerges that the majority of the leaders in companies are appointed by political kindness and not by the virtue of their qualification or of their skills. These managers once installed, have for only ambition to grant themselves financial means. Not mastering the modus operandi of management of companies, they transfer to these production units the classic methods, sowing then in any wind, the confusion. This should be illustrated by John Marc Ela's statement, that *"the party, real instrument of the power in the hands of bourgeoisie, strengthen the device of State and specify the power"* (Ela, 1990).

We still remind a recent period of the management of former Cotton Chad society, which was slandered all the time. By the way, we often attend a personalization of companies. Consequence, the corruption is set up as rule of conduct. Better, this one is in healthy in spite of texts which repress it. According to the penal code of 1963, any public misappropriation of deniers is a breach and liable to penalty. In reminder, the legislator of that time planned that the diversions are repressed according to their degree. But since 2000, we speak about the special law which repeals the capacities of the previous penal code. It is about the law No004/PR/2000 relative to the misappropriation of public means. Also, it is necessary to add the recent operation introduced by the Ministry of Justice and the Purification which pursues the crooks people who steal the public means.

All these initiatives should lead to a change of behavior but, the ambient reality is quite different thing: *We regret but, but we do not have the choice* stated one of our informer about cement factory of Baoré and to pursue, *how can we become stranger in our own land, we do not know where this cement is going*. What one should mention it is the lack of authorities' commitments to make these new companies be benefic to general people. Surely, the decision that consists of exportations these resources are quiet good but, when they do not bring change to people is another debate.

Many other sources need to be carried out and to see how Chadian people can one day enjoy the products of these new factories, because for now, nothing is ready to stop this desolation and some practices continue to be the art of companies' governance.

4.1.2 The affinities

In the light of what lives, the intrinsic values of the man for a deserved career fly into pieces to give way to slander, to the division, to the suspicion, to the blind regionalism which so compromises the good management of the products of these new companies. In Baoré for instance, where the cement is producing, it is within affinities the purchasing of this product is operated. One has to use corruption to have a chance to buy even one back. This is happening while the cement is regularly producing. Recently, trade men who are selling this product bought from Nigeria empty bags of "Dangote Cement design" which they filled out with cement from Boaré and sold at higher price. This is happening because the one of Nigeria is expensive than that one of Chad. It usually returns that the cement of Baoré is well and truly on the market, in our hardware stores. But, under another shape, at least, in the other packaging's come moreover. How is it made?

He tells that big hats of the power, these untouchable eternals would devote to a practice deserving of big circles Mafioso. Packages "Dangote" are legally   bought in nearby countries, led "legally" to Nguéli then cleared through customs "normally" before being brought   or   to   Baoré,   or   in   places   kept   secret   by   these   villains   economics (http://www.journaldutchad.com/article.php?aid=3499).

Anyway, some people believe that the frames of companies are for the exclusive service of their clan, tribe or family and that the efficiency of a service confronts to the monopoly of this one by the nationals of a region where from this endemic anarchy in the management of the companies. A simple head secretary can at his level promote or dislocate a senior official of State. And the acts of provocation with tribal character are multiple and the uncontested purpose of which is to protect or encourage the disproportionate ambition of some is to hide or to absolve the grave lacks of the others. According to Nestor Malo (2000), *"every director*

appointed at the head of the company, comes with his storekeepers prize". It is about those in that we grant a market to benefit from jars- wines. Also, companies are considered as the place of hiring for the relatives and friends even if they do not meet the criteria of skills. This has for consequence, *"the plethora of the staff which establishes a kind of load to the companie"* (Rititingar, 2008). Even in that case, the good managerial rule to stipulate companies need frames in the widened skills and, each in his post has to understand all the cogs of the system to outclass an always strong competition. Nevertheless, let us not forget the societies governed by the value of ethics of management.

4.2   From the speculation, bad management to the hope

4.2.1   La satisfaction d'une partie des besoins de la nation

Quite as we had mentioned it higher, Chad intends to become an emerging country before 2025. This is why several works are thrown among which one the construction of infrastructures. In spite of the current speculations, one should hope that the expensive imports of cement from Cameroon, Nigeria and Egypt and fuel from Cameroon, Nigeria can be stopped one day. As far as another site of cement says Modo II, in some kilometers in the north of Goz- Beida, in the region of silla is in the course of feasibility studies. This new project if it is concretized will produce 600.000 tons of cement a year, which will be added to 200.000 tons of Baoré and can finally solve the problem of Chadians in this domain.

4.2.2   Towards economic growth with the contribution of new units

According to African economic outlook's report of 2012, Chad Gross Domestic Product (GDP) growth is projected to reach 7% in 2012 (http://www.afdb.org/fr/countries/central-africa/chad/). Though this projection is driven by non-oil sector, there is whenever certain contribution such as the cement of Baoré.

In spite of the difficulties, it will however be necessary to recognize that better late than never. Today the Chadians can circulate with their own fuel. The refinery of Djarmaya produces several petroleum products such as the diesel oil, the lamp petroleum, the high-octane gasoline, the gas in kilo and oil in kilo. Also, several young graduates were now working in the field of the petroleum even if *"to work with Chinese, it is to go to hell. You work a lot to win little. You have a very short break time. They use us from 7 am till 6 pm"* (http://www.journaldutchad.com/article.php?aid=2990) as regretted one of the Chinese's factory employee. The matter is also to make effort to preserve Chadian natural resources from foreign enterprises because we are assisting to what Mamadou Diouf[26] has called the privatization of State and Economics. In reminder, the prices of various petroleum products are fixed as follows:

Fuel:
Super: 480 FCFA;
Gasoil: 525 FCFA;
Jet A1: 615 FCFA;
Lamp Petroleum: 375 FCFA ;

Butane Gaz (Arrete of Ministry of Commerce and Industry, 2012):
Vrac: 649 FCFA per Kg;
Conditioned: 713 FCFA per Kg;
Bottle of 3Kg: 1400 FCFA per Kg;

Bottle of 6Kg: 2900 FCFA per Kg;
Bottle of 12.5Kg: 9500 FCFA per Kg;
Bottle of 25 Kg: 18 200 FCFA per Kg;
Bottle of 32 Kg: 23 200 FCFA per Kg[27].

By inaugurating the factory, the President of the republic has declared in this term: *"you do not fetch any more petroleum products somewhere else and you also go to provide under region with your product"* (http://toumaiactu.mondoblog.org/2011/06/29/tchad-la-raffinerie-de-djarmaya-est-en-marche/). So the fuel was sold to 200 francs CFA the next day the liter was 274 francs CFA and an unprecedented shortage.

5 CONSLUSION

In the euphoria of the indepences, the countries of Africa in south of Shara had to opte for a politics of the industrialization centered on the substitution in the import. The implemented instruments were established essentially by the public investment and by the protection of the economy in a general way.

The theoretical foundations of this politics led in the decade 1960-1970 aimed at the acceleration of the process of their development considered there for the delaying on industrialized countries. After two decades of practice, the results were not as high as expectations because the fundamental needs of the populations were never satisfied. The disparities racked themselves and the poverty were severe in all the society, urban as rural.

This model, conceived to master the strategic variables to allow economies delayed to know a growth and sustainable was not effective. So the permanent desiquilibres employees whom know these countries pushed, during mid 80 year the reflexion towards another model:it is the one of economic reforms in general. The liberalization ,the stabilization, and the privatization of public entrepries are going to be in the center of the evnomic actions to change the sad situation.

This strategy become a paradigm otherwise universal to reduce the economic désiquilibres both for the developed countries and for the developing country. For Chdian government, it has been an obliged way: In the hope to solve these problems, this withdrawal brought nothing of positive to dike the poverty. That is why in the search for the remedies, the goverment multiplied the efforts these last years to put into practice the natural resources of the country not exploited.Ufortunately, the result remains mitigated. The cement of factory of Baoré and the mini refinery of Djarmaya that have being analyzed in this work are far to bring the satisfaction to Chadians. That's why it is convenient to revise the strategies already organized to restore hope to the populations; direct beneficiary of these investments. Because it has been demonstrated that about 55% of 12 millions of Chadians are living in extrem poverty and unemployment is also depht (http://www.jeuneafrique.com/Articles/Dossier/A2672p087.xml0/bad-petrole-inflation-investissementtchad-sursauts-de-croissance.html).

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Challenges of the Modern World - Contemporary Economy and Globalization

ENDANGERED FOLK RELIGION IN THE ERA OF GLOBALIZATION

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ABSTRACT
Globalization is a cumulative process widely felt by everybody and everywhere in current times. In every walk of our life globalization has been taking place with rapidity sometimes perceptibly and often surreptitiously. It is a blessing but it is not as an unmixed blessing. With unprecedented spread of globalization which manifests through development of world trade, technology, new ideas of post-modernity etc. throughout the present world, folk religion as a whole, is facing day to day an acute crisis than ever. Under pressure of globalization, the people even belonging to the little tradition almost in everywhere have considered scientific and technological progress more and more as the authoritative part of their life ignoring their root kept in the ageless folklore or folk culture. In the so-called global village every aspect of folklore such as folk music, folk dance, folk tale and folk religion are endangered irrespective of countries. In the fast changing world, the principal world religions like Islam, Christianity, Judaism, Buddhism, and Hinduism are not so vulnerable unlike so many regional folk-tribal cults. Due to presence of the seen and unseen forces of globalization, the mass culture or the popular culture which was developed on the basis of a life with an agricultural bias is currently undergoing major changes. In short, the folk cults are rapidly losing its vital force to a large extent. Declining of folk culture is rapidly taking place along with destruction of its age old rural and rudimentary character. Although millions of people in the world still hold to the popular religion, it has no written history, priesthood or no scriptures. In this proposed study the attempt should me made to unfold the truth that impact of the globalization has become a real menace to the folk religion worldwide.

Keywords: Folk religion, Globalization, Mass culture, Vulnerability

1 INTRODUCTION

Our current times may be justifiably termed as 'The Era of Globalization'. Globalization portrays the socio-political, economic and cultural atmosphere of the contemporary world. It is generally said that the current model of world political economy which is generally known as globalization, represents more of a today's business ideology rather than a new intellectual paradigm. Again, it is further argued that 'while some people think of globalization as primary a synonym for global business, it is much more than that. The same forces that allow businesses to operate as if national borders did not exist also allow social activists, labour organizers, journalists, academics and many others to work on a global stage' (http:boloji.com/perspective/223.htm). The people around the world are more connected and interlinked to each other today than ever before in the long history of mankind. We live in an intensely interdependent world in which people all over the globe with their immense diversities and dissimilarities of culture and historical experiences are compressed together in instant communication. This unprecedented phenomenon has been appropriately titled 'Globalization'.

Globalization is a cumulative process widely felt by everybody and everywhere in present times. In every walk of our life globalization has been taking place with rapidity sometimes perceptibly and often surreptitiously. Eriksen states, 'it is doubtless true that globalization is a

pervasive tendency influencing the lives of people everywhere—Amazon rainforest to Japanese cities…Truly global processes affect the conditions of people living in particular localities, creating new opportunities and new forms of vulnerability' (Erikson, 1999). But at the same time, peoples' indigenous culture as well as tradition-bound folklore is under the lethal threat of the forces of globalization in our days throughout the world. Folklore including folk religion has played constantly an important role in handling down social and cultural norms and religious knowledge and wisdom and in keeping the social structure stable. The unbridled expansion of globalization and the monoculture, promoted by the first has continued at an accelerated rate along with the denigration and decline of native folk culture and folkway of life. Indigenous peoples have struggled for centuries to maintain their identity and way of life against the tide of foreign intervention and foreign economic investment and the outsiders that often come with it. Such an identity formation is an inherent human trait. Formation and preservation of identity is people's source of meaning and experiences. Singh analyses, 'Identities are formed and become meaningful at the conscious, subjective of human nature and consciousness on the one hand and on the other through sharing cultural practices common defined by differences of territory, ecology, ethnicity and historical experiences of the people in societies' (Singh, 2003, p. 71). Religion especially folk religions play a very significant role in the formation of identity in society and culture. Daes and Irvine (2004) justifiably observes,

> Indigenous peoples today stand at the crossroads of globalization. In many ways, indigenous peoples challenge the fundamental assumptions of globalization. They do not accept the assumption that humanity will benefit from the construction of a world culture of consumerism. Indigenous peoples are acutely aware, from their own tragic experience over the past 500 years that consumer societies grow and prosper at the expense of other peoples and the environment.

Scholars raise deep concern over the impact of globalization on folklore, which was on the one hand, getting marginalized and on the other getting popularized through new technology rapidly (Reddi, 2002). Through the ages in almost all countries of the world particularly Afro-Asian and Latin and Central American countries, folklore and folk religion played a major role in the formation of a 'public space' or a 'public sphere'. It provided for both legitimization and construction of world view and socio-political order. This public space is being reduced day by day in this global village under the impulse of globalization. This study attempts to unearth how such folklore in general and folk religion in particular has relevance in our times, and how globalization brings changes in the popular cults, beliefs and practices constantly.

2 UNDERSTANDING FOLK RELIGION AND ITS RELEVANCE IN THE GLOBAL VILLAGE—INDIAN EXPERIENCE

Every culture either savage or civilized has its inherent folk elements. However, the idea of including folklore within the framework of the 1972 World Heritage Convention (WHC) was raised during its drafting (Blake). In the year 1988 UNESCO made its Recommendation of the definition of "folklore". Folklore and its most predominant component folk religion was never a relic of the past, but a phenomenon, constantly happening. Charles Francis Porter rightly observed: 'Folklore is a lively fossil which refuses to die.' Again, it is properly stated that folklore and social history are inextricably bound up with each other, and the same ground. Even it is considered as an important tool to articulate the human history of endless class struggle. Folklore signifies the wisdom of people's knowledge. It is an echo of the past but at the same time it is also the vigorous voice of the present. In similar way, folk religion

("*lokayata dharma*") has ever been vital in the life and culture of the vast mass of the peoples belongs to 'Little Tradition' in our present world. The Indic term '*Lokayata*' (folklore) may be taken as the protected depository of the popular religious tradition which reveals the philosophy of the common people and the worldliness. Folk religion may be defined as 'the totality of all those views and practices of religion that exists among the people apart from and alongside the strictly theological and liturgical forms of the official religion' (Yoder, 1974, pp. 1–15). Analyzing the significance of the folk religion Parrinder observed, 'There are millions of the people in the modern world who hold to religions that are pre-literary, that is to say that have no written history and no scriptures' (Parrinder, 1961, p. 17). In other words, folk religions usually had their origin outside the scope of established creeds or leading world religions such as Hinduism, Buddhism, Christianity and Islam. However, Durkheim rightly observes that religion is the basic and fundamental elements to preserve social structure intact.

India has a rich and resourceful folkloristic cultural tradition. Folk arts, cults, creeds, rites, rituals, beliefs, myths, literatures, music etc. are components which enrich age-old folk tradition of this country. In India numerous folk cults and popular religions had their origin and development in pre-Vedic or non-Brahmanical cultural environment. However, irrespective of cultures and races such folk cults developed with regional or local characters are remained neglected and marginal in the mainstream cultural paradigm of the upper classes people through the ages. The folk religions primarily based on the concept of fertility, reproduction has a great antiquity, and origin of these may be traced in the primitive days. In Indian archipelago the number of such folk cults and regional deities is unlimited in true sense. There is almost each village or '*mahalla*' has its own guardian deity who is responsible for the prosperity and wellbeing of the village as a whole. Bhattacharya (1978) says:

> The blessings of the gods are invoked on behalf of the whole village in time of general distress, e.g. epidemic, drought and so on. The most democratic aspects of the cult are that no village god responds to any personal or individual prayer. With the breakdown of the community life of the villages, most of the primitive traits of the cult have been already disappeared, and the few that still remains are holding their own against heavy odds.

Almost in all folk-tribal societies in the world, the folk religions are profoundly associated with few common attributes such as animism, mother goddess worship, phallic worship, worship of the ancestors or the cult of the dead, tree and plant worship, '*vrata*' or women folk rites and so on (Bandyopadhyay, 2007, pp. 5–9). Folk cults are inseparably associated with village life as well as ethnic societies. Popular deities are widely worshipped on different occasions in the life cycle, namely birth, puberty, marriage and death or with the prayers for offspring, bumper crops, rain and overall fertility and fecundity (Bandyopadhyay, 2007, p. 7). Again, the worship of mother goddess or the feminine cult of fertility has a special place in the folk religions of India. A large number mother goddess and female fertility divinity rule dominantly the folk world in this subcontinent. As a whole, these folk cults and folk arts forms associated with it are not the mere expressions of what is just 'ancient', it is a reminder of ancient social discourses and their continuous renewal (Rajeev, 2010, p. 116).

In Indian culture we find at the wide prevalence of the worship of a large number of folk-tribal deities and divinities, having no scriptural sanction. The folk religious beliefs and practices, preserved and prevalent in the popular religious system bear almost no connection with higher and metaphysical aspects of the Brahmanical religion and classical Hinduism. These popular cults found in folk-tribal religious traditions of India have more or less

universal as well as ageless character. Whitehead once observed, 'To the students of comparative religion the study of the weird rites and ceremonies connected with the propitiation of the village deities is interesting because it reveals many points of contact with primitive forms of religion in other lands, and also because it enables the student to see these primitive religious ideas in very different stages of development' (Whitehead, 1921; referenced by Maity, 1989, p. 3).

These 'local' or 'regional' folk deities are generally considered the tutelary or guardian deities in Indian folklore. Bhattacharya (1978, p. 43), further states, 'the village god is responsible for the welfare of the village as a whole—he has no jurisdiction beyond the territorial boundary of the village.' However, with the unprecedented development of science and technology in one hand, and rapid spread of overwhelming globalization on the other, such folk religions have faced a grave crisis than ever. Indeed, 'Indigenous people have their dynamic living cultures and seek their place in the modern world. They are not against development but too long they have been victims of development and now demand to be participants in—and to benefit from—a development is sustainable' (Magga, 1995).

3 INDIGENOUS PEOPLES AND THEIR FOLK RELIGIONS AT THE CROSSROADS OF GLOBALIZATION

There is hardly any doubt that globalization has brought a mixed blessing. In the present world situation, all are equal but some are more than others. They set the tone and determine the pace for the rest. Globalization is a power that can exert cultural and economic pressures in individual and social life all over the world. Dalby observes, 'Globalization was a term used by anthropologists and sociologists to discuss cultural changes well before the widespread use in discussions of economics and business' (Dalby, 2007, p. 36). Globalization in spite of its recurring claims to support diversity is trying endlessly to promote a worldwide monoculture around the globe. Individual distinction of cultures and society are wiped off through a homogenous global culture (Rajeev, 2010, p. 116). Daes and Irvine (2004) assesses the whole situation elaborately,

> Globalization presents us with a profound contradiction, however. It is creating a global market for dissemination of fresh ideas and new voices, while making it easier for one voice to down out all the others. It is providing each of us with finger-tip access to the whole range of human cultural diversity while, at the same time, it is dissolving all cultures into a single supermarket with standard brands. It is making it possible for even the smallest society to earn a livelihood by selling its ideas, rather than selling its lands or forests. But it is also threatening the confidentiality of indigenous peoples' most private and saved knowledge.

This globalism has a very negative impact on indigenous peoples and their folklore especially of developing countries where there are weaker pluralistic cultures is being suffocating tremendously. In reality, 'ninety five percent (95%) of the world's indigenous peoples live in the developing countries, and legislation enacted by these countries is insufficient, by itself, to prevent the piracy of indigenous knowledge by researchers and corporations in industrialized countries' (Daes and Irvine, 2004).

Globalization has accelerated the flows of investment that profoundly affect the livelihoods and way of life of indigenous peoples. In the last three decades nearly 100 countries have strengthened legislation to promote investment in several extractive sectors such as mining, gas and oil. Indeed, 'global flows of goods, ideas, people and capital can seem a threat to

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national culture in many ways. They can lead to abandonment of traditional values and practices and the dismantling of the economic basis on which the survival of indigenous culture depends' (Globalization and Cultural Choice, 2004). It is rightly said that globalization is, in other words, not merely another words for the growing transnational economy. It is true that it is largely driven by technology and economic interests, but it must be kept in mind that it encompasses a wide range of processes that are not in themselves technological or economic (Ornek, 2007, pp. 83–88). The irony is that such globalization cannot be turned back. The hard truth is 'whether we are in favour of globalization or are against it, it is definitely an ever-expanding process…Economics is the most important dimension of globalization, which affects politics, and politics in return affects economics, and both of these affect the cultural dimension of globalization' (Ornek, 2007, pp. 83–88). It is at this point that globalization becomes a problem from the cultural identity perspective. Today throughout the world, in the midst of discussion on globalization, it is increasingly being claimed that globalization brings with it homogeneity and that the identity of countries, in short their cultures, are becoming destroyed (Erikson, 1999).

The present century is considered the 'Age of Globalization' as it is also the age of cultural crisis in a sense. It is the age in which folk religion either undergo change in their indigenous form, or totally disappear. At present times, people even the rural folks in almost everywhere have considered scientific and technological development more and more an essential and authoritative part of their lives. Due to speedy urbanization and industrialization the 'Little tradition' as well as peoples' culture which developed on the basis of a life with an agricultural bias is undergoing major changes. Once the change is that the folk religion is gradually losing its vital force to a large extent (Bandyopadhyay, 2011). The transformation that globalization is going to make in the cultural arena is that the whole world is going to come under the dominance of a macro culture. As a result, the pluralistic micro cultures that retain our cultural identity are on the verge of effacement, and society is becoming subject to domination by all pervading monoculture, skillfully articulated be globalization (Bandyopadhyay, 2011; Spich, 1995, pp. 6–29).

Through globalization the entire world is changing into a single space, single culture and single identity. Traditional folk religion as well as folklore is gradually subverted or eliminated all over the globe. It is argued by the scholars,

> As for the political and cultural dimension of globalization, we are confronted via the world media with an agenda reflecting the downfall of the national state model and with the prevalence in recent times of the terms and fears known as cultural "homogenization" and micro nationalism. In recent years, with the process of globalization, the international media has begun to present the national state model as an old fashioned style of management (Ornek, 2007, pp. 83–88).

Globalization is currently redefining cultural contexts. In a globalized world, folk art forms are being removed from their basic religious ritualistic nature. Comprehensive field survey of the present author of the tradition-bound and religion depended scroll-paintings of Raghurajpur, Orissa in India can show clearly that this old and traditional folk art which is an inseparable part of local popular religious system is suffocating for existence during last few decades. Almost same things are happenings with other religion-bound folk arts throughout the world in our times.

Folk cults and folk art are mutually dependent since days immemorial. Mostly terracotta animal figures such as clay made horses or elephants are offered to any and every village deity irrespective of sex and character all over rural India (Bandyopadhyay, 2011, p. 37). Similarly, various types of folk paintings such as scroll paintings, '*pata*' paintings and '*madhuboni*' paintings with representations of folk gods and goddesses are being worshipped widely by the village peoples throughout country. Now, in the days of globalization when a single macro culture is being imposed directly and indirectly, very survival of all these folk art forms, profoundly associated with popular religions is under question. Besides, the issue of growing commercialization of these folk arts and resultant loss of aesthetic qualities should not be overlooked. It is also argued that the folk art forms presented out of their religious contexts lead to their commercialization and in a market economy the traditional rural artists will be out. With this, the physical and ecological landscape based on ethnically significant history, legends and myths will no longer be there (Rajeev, 2010, p. 117). Again, the harvest rites or agrarian rites and rituals which are also widely prevalent and closely associated with folk way of life and minor religious systems in the countries like India are being disappeared with rapidity. Indigenous peoples justifiably fear that their traditional folklore, ancient cultural practices are endangered by the endless flow of foreign investment in their respective countries. They see 'globalization as a threat to their cultural identities, their control over territory and their centuries-old traditions of knowledge and artistic expressions. They fear that the cultural significance of their territories and knowledge will go unrecognized—or that they will receive inadequate compensation for these cultural assets. In these situations globalization is often blamed' (Globalization and Cultural Choice, 2004). Thus in a global paradigm, emergence of such a hybrid culture has replaced the traditional folk culture in the Third World countries.

4 CONCLUSION

At the end of this discourse, it may be assumed that if it is true that the world is rapidly becoming a global village, and then we have more reason and responsibility than ever to treat others—indigenous peoples accompanied by their traditional folk culture with respect and reciprocity. The proper need of the time is to "respect, preserve and maintain" the traditional knowledge, religion, art and culture of the vast rural folks living around the world, and to ensure that the benefits of globalization and commercial application are shared equitably. Daes and Irvine observe, 'All of us share a heavy historical responsibility for managing the next stages of globalization better than we managed previous stage of the process. In particular, I believe that we must continue to insist that the rules of the international marketplace are not only procedurally neutral, but substantially fair' (Daes and Irvine, 2004). For the benefit of the common people we have to preserve the existence of multiple 'public sphere'. Folklore, in broad sense, in public spaces served as a medium for both legitimization and contesting dominant world views. It could be used either to stress homogeneity or articulate heterogeneity. The reality is folklore played a vital role in the constitution of these discursive spaces and generating opinions. It continues to fill the space between political authority and individual group interests of the mass. It acts as a potent means to generate opinion, achieve consensus and also put questions to the powers that be.

It is rightly assumed that when the global flows lead to cultural exclusion, multicultural policies are highly needed to manage trade, immigration and investments in ways that recognize cultural differences and identities (Globalization and Cultural Choice, 2004). UNESCO (2001) clearly stated:

> Cultural diversity is as necessary for mankind as biodiversity is for nature. In this sense, it is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generation.

Simultaneously, in these days, indigenous groups are increasingly assertive. Globalization has made it easier for indigenous people to organize, raise funds and network with other groups around the globe, with greater political reach and impact than before. We should mention in this respect that the UNO declared 1995–2004 the International Decade for the World's Indigenous People, and in 2000 the Permanent Forum on Indigenous Issues was created (Globalization and Cultural Choice, 2004).

Now the hypothesis is standing within the frame of the ideology of pluralism, we have to maintain a strong interactive relationship between modernity and tradition, and folk religion can be used as an important tool for this task. Again, the positive qualities of globalization can be utilized to in this respect. We need a global consensus that the aboriginals and indigenous peoples are the owners of their own cultural heritage such as traditional folk religion, folk arts, folk music, folk dance, folk literature and so on. We have to admit unquestionably: 'Development divorced from its human or cultural context is growth without a soul. Economic development in its full flowering is part of a people's culture' (Magga, 1995).

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GLOBALIZATION CAN LEAD TO INCLUSIVE GROWTH IN DEVELOPING COUNTRIES – MYTH OR REALITY

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ABSTRACT

Globalization and the related concerns for poverty and exclusionary development have become a focus of international discussion in recent years. Sometimes, contrary to the commitment of global corporations to act as engines of economic growth trickling down wealth to the rest of society, their policies lock wealth at the top, denying job opportunities to unskilled labour, increasing the number of people dislocated from their traditional livelihoods, decreasing access to food and vital social services to urban poor and reducing scope for participatory planning and community involvement. In India, due to globalization, the spatial structures of cities and the hinterland are changing as new economic production patterns require more horizontal integration between functions in different countries. With shifting of attention to external locations and activities by the major metropolitan cities of the country, a paradigm change from earlier urban spatial patterns is noted. The territories or regions which surround these rapidly globalizing cities are increasingly playing a very insignificant and irrelevant function in their business. However, in a major metropolitan region of eastern India i.e. Kolkata Metropolitan Area, due to a very unique process of internationalization of economic activities, the ''local'' and the ''global'' are deeply intertwined. This paper attempts to highlight that how within KMA, due to a very unique process of internationalization of economic activities, the hinterland especially the new towns are aspiring for world class life style including in the process a large number of local companies. These new centres of development are acting as excellent platform for diverse kind of linkages between global level activities and local business houses.

Keywords: Globalization, Inclusive development, Local ecpnomy

1   INTRODUCTION

Globalization and the related concerns for poverty and exclusionary development have become a focus of international discussion in recent years. The international giants and global corporations are expected to act as engines of economic growth trickling down wealth to the rest of society. It becomes a matter of concern when their policies focus more on the elite class of the society, denying job opportunities to unskilled labour, increasing the number of people dislocated from their traditional livelihoods, decreasing the scope of collaborating with the local companies and reducing scope for participatory planning and community involvement. Striking a balance between the twin forces of globalization and localism has recently become a challenge for planners and policy makers in many Asian cities.

Recent work on cities in East and South-East Asia has highlighted the need to consider contemporary urbanization as ''a complex interplay of processes and agencies operating at different scales'' (Chang et al., 2004) and to view cities as the product of the interpenetration of both local and global influences. Brenner, in particular, has highlighted the role of city – hinterland chemistry and regulatory role of State level institutions and policy makers in facilitating the movement of global capital. He has termed this as 'reterritorialization', a process by which territorial organization at different scales is transformed to enable

accelerated circulation of capital through large scale and networked infrastructure as well as institutions. Swyngedouw's (1997) concept of 'glocalization' also accepts this continuous and unique process of globalization where the ''local'' and the ''global'' are deeply intertwined.

These empirical studies strengthen the viewpoint that rather than seeing the global and the local as two opposed and dichotomous entities, they are better viewed as complementary and acting together to produce new urban landscapes of economic prosperity (Shaw and Satish, 2006).

This paper attemts to explore how the local companies are appropriating and adapting the global and moving towards an inclusive and sustainable socio – economic growth in Kolkata Metrolitan Area , located in eastern India.

2   INDIA AND GLOBALIZATION
In many developing countries, the Government and urban decision makers are often confused by priorities accorded to quick development on one hand and inclusive development through integration of local institution or local economy on the other.

Urban theorists such as Brenner (1999), Gibson- Graham (2002) and Herod (2003) have been vocal against the idea of universalizing of world cities and have tried to establish significant differences in the 'local' experiences of globalization.

The opening up of the Indian economy since 1991 has brought much change in large cities. In this country, due to globalization, new production patterns require more integration and interaction between functions in different countries. With shifting of attention to external locations and activities by the major metropolitan cities of the country, a paradigm change from earlier pattern of settlements and socio – economic profile of people living in the city and hinterland is noted. The territories or regions which surround these rapidly globalizing cities are increasingly playing a very insignificant and irrelevant function in their business.

In India, especially since 2000, there has been increasing demand for office space by the export-oriented IT, BPO (business process outsourcing) and KPO (knowledge process outsourcing) organizations that are coming up in metropolitan cities. But, many of these BPO units are owned and managed by Indians who are serving markets in the US, UK and other developed countries. In addition, the NRI (non – resident Indians) have been creating a demand in high – end residential sector. As a result, in spite of keeping out FDI from the real estate sector, global influences have been playing an important role on local economy and indirectly shaping the built environment. Secondly, there has also been increasing use of global expertise in the planning and design phases of different Software Technology Parks, high – end housing projects, retail and office spaces. Thus though the projects are built locally with local materials, there is a strong global element in their planning, designing and subsequent usage. In majority of cases, international design houses are collaborating with local architects and engineers for these world class projects being developed by the national builders.

It has been observed by analyzing the quantity and type of both global and domestic investments in major urban regions of the country for the period 1991 till 1998 that large cities located in the western and southern parts of the country were doing well in attracting both FDI and domestic investment. (Shaw, 1999). Some Indian cities, for instance, are the

sites of highly successful local organizations that through the last ten years have risen to become global organizations. Local IT companies such as Wipro and Infosys (Bangalore), Satyam (Hyderabad) and TCS (Mumbai) and pharma companies such as Biocon (Bangalore), Ranbaxy (Gurgaon) and Dr. Reddy's (Hyderabad) are examples of such organizations (Shaw and Satish, 2006).

3   METROPOLITAN DEVELOPMENT IN THE AGE OF GLOBALIZATION

Since the paper attempts to explore the extent of global and local influence in recent development of Kolkata Metropolitan Area, the author feels it appropriate to understand the dynamics of metropolitan development in this era of globalization. The common phenomenon found in metropolitan cities across the globe include fragmentation, differentiation, growing inequalities, poverty concentrations, decentralization, polarization and 'spatial mismatch', where problems are found in jurisdictions lacking the resources to solve them (UN Habitat report, 2004). Over the last decade, these processes have taken on new dynamics as stated below since global forces become embedded in local spaces and socio-economic realities.

- The restructured metropolitan economy: Urban economies have undergone significant industrial restructuring during the last four decades, losing manufacturing jobs and gaining in new service functions. This process has changed spatial patterns, leading to clustered employment opportunities on the peripheries of metropolitan areas, while also increasing income disparities within and between industries.
- The globalization of city space: Globalization has contributed to industrial restructuring by offering opportunities for footloose industries to leave cities altogether. But it has also increased the connections and linkages between economic production, consumption and investment across and between cities and countries.
- The restructuring of urban form: Metropolitan areas have expanded to outer cities, edge cities and peripheral settlements, changing the economic and social character of central areas.
- The appearance of the fractal city: Patterns of economic and social differences, identities and inequality are replicated in many communities who make up the metropolitan area.
- Violence and conflict in metropolitan space: These differences and changing patterns of dislocation and relative inequality have led to growing crime and violence, which is managed through increasing numbers of gated communities and other efforts to provide security in insecure metropolitan environments.

It has been primarily understood that in this era of globalization, the metropolitan areas are in the process of restructuring and reconstituting themselves, with new economic activities, newer built spaces, different kinds of people and new forms of cultural expression. It is not surprising that many local institutions and companies are lagging behind and are unable to evolve as quickly.

In India, the seven largest cities, each with a population exceeding 4 million, had been experiencing a construction boom from rapidly growing residential and office real estate as well as from large infrastructure projects such as flyovers, the creation or extension of metro systems, circular rail systems, airports, high-speed road connectors, and shopping malls and entertainment centers. The same is now true for the multicultural and cosmopolitan city of Kolkata, which is the main business, commercial and financial hub of Eastern India. Kolkata Metropolitan Area (KMA) that today extends over 1851 sq. km. is essentially the metropolitan outfit of the city of Kolkata that had housed the capital of India during a major

part of the British colonial rule. KMA has witnessed an economic decline from the late sixties till the late nineties and the city's economic scenario only improved in late nineties when the economic liberalization in India reached Kolkata.

This paper attempts to highlight that how within Kolkata Metropolitan Area, due to a very unique process of internationalization of economic activities, the hinterland especially the new towns are aspiring for world class life style including in the process a large number of local companies. These new centres of development are acting as excellent platform for diverse kind of linkages between global level activities and local business houses.

4   INTRODUCTION TO KOLKATA METROPOLITAN AREA
The metropolis has evolved over a very long period of time although history of planning and development of the metropolis as a single geographical entity is a relatively recent phenomenon. Kolkata Metropolitan Area has two major components:
- The conurbation meaning the continuous stretching in a linear pattern along the east bank and west bank of the river Hooghly with Kolkata and Howrah being the two most prominent cities on east and west bank respectively.
- Rural areas lying as a ring around the conurbation and acting as protective green belt.

5   GLOBAL AND LOCAL PLAYERS IN KMA
Historically speaking, the multinational companies had a relatively late entry in Kolkata as compared to other metropolitan cities in India. This is primarily attributed to the then priority given by the state government to agriculture. As a result, the state's leading industries, faced loss and lower productivity which led to an overall decline in the state's economic performance. There was industrial flight from the state because of loss of workdays due to strikes and lockouts. Increasing unemployment and declining quality of urban areas resulted in a slowdown of migration into the metropolitan area. By the early 1990s the state government realized that a revival of the manufacturing sector and a revival of Kolkata were important to the future of the state. But by then, the image of the city as a destination for industrial investment had fallen to a very low level and was rarely a good choice for industrialists, both domestic and foreign.

However in the following decade, i.e. after 2000, there was a change in the scenario and state patronage was available for setting up IT and ITES. The state government attached high priority to growth of IT & ITES industries in the State and had announced in January, 2001 the Information Technology Policy 2000. The KMA was already prepared for this venture with an abundant supply of skilled and semi – skilled persons to suit these industries and lowest possible cost of operation, cheap abundant power and lowest cost of living.

Some statistics on socio – economic scenario of KMA confirms a gradual structural change with the share of Primary sector falling and those of Secondary and Tertiary sectors increasing in the late nineties. The Tertiary sector witnessed a phenomenal increase of State Development Product (SDP) growth of 11.1 percent per annum between 1993-94 and 2001-02. This rate of growth was found to be even higher than that (9.5 percent per annum) for West Bengal. The corresponding rate of growth for KMA was 3.8 percent between 1985-86 and 1993- 94 (KMA - Vision 2025).

In Kolkata, evidences have proved that, just as global agency influences change in the local, local agency can also influence the global or acquire global stature. The state of West Bengal

has registered a steady growth in the IT sector during recent years dominated by export performance mainly due to inexpensive rentals, a successful private-public partnership model, incentives from the state government and political stability. As a result, this had been a fair playing field for both foreign and local real estate developers. Sector – V at Saltlake within KMA has one of the fastest growing software technology parks in the country to-day, registering a compound annual growth rate of 119 percent during 2002-03. Currently, there are 185 IT companies in Sector-V of Salt Lake employing more than 15,000 IT professionals. However, in Kolkata, in sharp contrast to Bangalore, which is another very successful IT hub of the country, much of the investment is from domestic entrepreneurs. Foreign direct investment has been much more limited and the globalization that has been so rapid in Bangalore and brought with it its own problems has been much more muted here.

Table 1: Industry wise investment in Kolkata during initial phase of globalization (Shaw and Satish, 2006)

Sectors	Cost in (Rs billion)	In percentage
Power, Oil, Gas and Petroleum	44.68	37.37
Chemicals, Paints, Polymers and Plastics	0.20	0.17
Pharmaceuticals and Medical Systems	0.79	0.67
R&D, IT And Software, Call Centers and Electronics	6.01	5.03
Hotels, Recreation, Commercial, Retail and Hospital	15.11	12.63
Automobiles and Auto Ancillaries	0.75	0.63
Metals, Machinery, Engineering, Electrical and Others Manufacturing	4.04	3.38
Food And Breweries	1.29	1.08
Jute, Paper, Leather, Textiles and Garments	5.00	4.18
Roads, Railways and Infrastructure	41.68	34.86
Total	119.55	100.00

The industries that have attracted investment for the period 1994 till 2004, which is considered the changing phase or the phase of initiation of globalization in KMA, are primarily those related to the city's infrastructure. Thus 37% of the total investment has gone to the power sector while another one third of the investment has been on roads, railways and related infrastructure. About 12% has gone into the building of hotels, recreation and commercial facilities. Only 5% of the total investment has so far gone into the IT and ITES sector. However, this too is changing with the recent growth of BPOs in the city especially with the rise of Rajarhat New Town in KMA to an internationally recognized centre for IT and ITES over the last one decade, starting from the mid-nineties.

Today International Giants such as IBM, Accenture, Cognizant, Texas Instruments, Cisco Systems, Intel Asia Electronics Inc, Deloitte, Sun Microsystems, Honeywell, PwC, HSBC Global Resourcing, Capgemini, Atos Origin, Foster Wheeler, Siemens, and Novell have set up their offices in Kolkata. Kolkata based companies such as ITC Infotech, The Interface Pvt. Ltd., RS Software, IKF Technologies, Indus Net Technologies, Metalogic Systems, Ushacomm, WDC, Ontrack Systems, BNKe Solutions, Web Spiders, Intrasoft Technologies etc IBM Global Services India Pvt. Ltd., WIPRO, Tata Consultancy Services (TCS) Ltd, Infosys, Cognizant Technology Solutions (CTS), GE Capital International Services, HCL Technologies Ltd. also have their branch offices and developmental centers here.

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This apart, other big Indian software firms have already made Kolkata their hub of operations for Eastern region of India. Of these Wipro, Infosys, TCS, Tech Mahindra, ITC Infotech, HCL Technologies, MphasiS, Genpact, Tata Interactive Systems, Ramco Systems, Firstsource, CMC Limited, NIIT Technologies, Moser Baer Ltd., Aptech IT, Aegis, Aditya Birla Minacs, Rolta India Ltd are leading the way.

Table 2: Cumulative total investment in Kolkata (in Rs billion) (Shaw and Satish, 2006)

By ownership	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Central goverment			0.40	0.40	0.40	0.40	2.92	2.92	25.42	27.04
State goverment									0.50	0.52
Private (Indian)	0.15	0.27	29.42	50.40	50.40	53.94	57.50	66.07	75.14	75.67
Private (Foreign)								0.70	0.70	0.70
Joint Sector	3.22	3.22	13.12	13.12	13.12	13.12	13.12	13.12	13.92	15.62
Total	3.37	3.49	42.94	63.92	64.36	67.46	73.55	82.81	115.67	119.55

Currently more than 200 IT Companies have their offices in different parts of Kolkata and New Town catering to a large section of population in KMA (www.Calcuttaweb.Com). These companies have been most helpful in blurring the divide between global and local. Nevertheless, the primary source of Kolkata's growth, so far, has been largely the domestic private sector as is evident from table 2.0. This growth in IT sector, in turn, has fuelled the demand for office space and technology parks and the subsequent expansion of the city. As noted by Nair (2005), ''Major cities are witnessing a sustained real estate demand that has largely been a result of growth spearheaded by a spurt in the knowledge sector largely comprising the IT and BPO led businesses''.

It has been observed that, both global and local real estate developers dominate the design, layout, and planning of township projects in Kolkata.

The two major growth hubs within Kolkata Metropolitan area are New Town, Rajarhat and Kolkata West International City.

In Rajarhat, where Housing and Infrastructure Development Corporation (HIDCO), a quasi – governmental organization plays the lead in planning and developing the township, due importance has been given to the growing and specialized needs of the IT sector workers.

Located adjacent to the Nabadiganta Industrial Township (also known as Salt Lake Electronic City) where the bulk of the IT industry is located, Rajarhat is committed to provide the much needed residential and commercial base for those working in this growing sector.
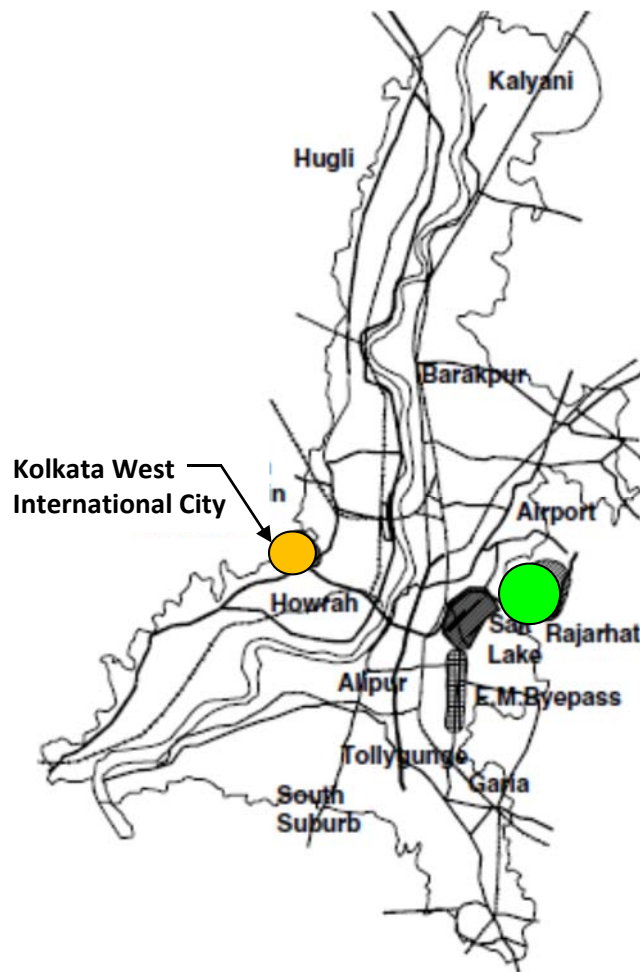
Figure 1: Kolkata Metropolitan Area

The uniqueness of Rajarhat city region lies in the fact that its growth is primarily banking upon the local talent of workforce, comparatively lower costs of doing business in the state and greatly improved infrastructure such as electricity and water supply rather than on influx of foreign capital. In addition, the township also serves as a center for new regional level community facilities, establish a new business district, provide land for nonpolluting, inoffensive, and nonhazardous industries, and develop an environment friendly and aesthetically attractive urban settlement functionally integrated within the future metropolitan structure. In short, Rajarhat is planned as a self-sufficient urban center, paying heed to the need for a desirable place to live and work in. This is very evident from the Master Plan and land use break up for the township, wherein open spaces have been given top priority as well as the growing needs of commercial space for setting up IT/ITES businesses have been accommodated through successive planning stages.

Initially WEBEL has been the facilitator for development of Information Technology (IT) and IT Enabled Services (ITES) in the state, besides being the nodal agency for development of electronic industries. WEBEL has already distributed 177 acres of land for IT and ITES industries in and around sector V at Salt Lake, Kolkata. For setting up of ITES infrastructure, WEBEL has signed a MoU with HIDCO for 200 acres of land at New Township of Rajarhat

for development of IT and related industries which would provide ample opportunities to both international and local players in the field of both IT and real estate.

A number of foreign investment firms, real estate firms, and housing finance institutions have already made their presence felt in this township. Their focus is on the young upwardly mobile professionals and growing middle class who aspire to live in a "global city." In addition to these, local developers with inputs from international architects and designers have been creating such spaces at par with global standards. City based global real estate consulting and brokerage firms which act as intermediaries between MNCs and local developers have been influencing design standards based on the space requirements of MNCs and thus bringing in a global character to the newly built spaces of Rajarhat and Kolkata. Both foreign (Keppel Land, Ascendas) and domestic (DLF Pvt. Ltd., Unitech, Bengal Shrachi Housing Development Ltd., Bengal Ambuja housing Development Ltd., Bengal Shristi et – cetera) real estate firms have invested in large-scale mixed use development projects in Kolkata. Urbana and Rosedale are two residential project under construction in Kolkata and New Town respectively which is being developed by a group of local devlopers associated with the State Housing Board. Internationally acclaimed Architect Stephen Coates from Singapore is the Principal Architect for both the projects and Bangkok-based landscape design firm Green Architects and Structural Engineer Mr Predrag Eror from Dubai have designed Urbana with their expertise.

Figure 2: Urbana, Kolkata

Figure 3: Rosedale, Rajarhat

However, in the Kolkata West International City (KWIC), the players involved are slightly different in nature. A consortium of foreign investors including Salim group from Singapore takes lead along with Kolkata Metropolitan Development Authority (KMDA) who plays the role of facilitator's. Initiated by the State Government, the State Industrial Development Board, and the departments of Municipal Affairs and Urban Development played an active part in procuring foreign investors in the project. The foreign consortium then had to team up with another Indian partner in a joint venture company that was then entrusted with the task of planning and developing the KWIC whereas the state government was responsible for land

assemblage and leasing. The KWIC is therefore unique in the way foreign direct investment is being wooed and utilized in the development of urban areas in and around Kolkata.

6 CONSLUSION

As emphasized by Ong and Roy in 2007, (cited, Chen, Wang, Kundu, 2009), the globalization in Asian countries is always heterogeneous in nature in which local actors and institutions, particularly the state and city governments, local developers, and urban middle class, are actively involved. Similar situation is observed in Kolkata Metropolitan Area as well. Following are major reasons for this unique type of development in KMA in last two decades:

a) Creation of a generation - next middle class:

They cover a wide range of professionals such as employees of multinational corporations, international business solicitors, accountants, engineers et – cetera. These people receiving a global standard pay package have a considerably high disposable income due to the comparitive lower cost of living in this metropolitan area especially the cost of owning a property is much lower compared to other metropolitan areas of the country like Delhi and Mumbai. An ongoing study at Indian Statistical Institute (ISI) by Buddhadeb Ghosh (Hindustan Times, Kolkata, 2009), points out that Kolkata has the highest per capita purchasing power among all metros. This has a direct impact on the demand for goods and services including quality residential, educational, health, transportation and recreational facilites. This opens new opportunities for a diverse range of local entrepreneurs. This new category of middle class people is vital for global capital not only as cheap skilled labour, but also because they facilitate the penetration of global capital to the developing world. They are not only in the "middle" between capital and labour, but also between global and local (Xiang, 2002).

b) Active role of State Government:

The active support from state Government have been instrumental in making KMA a preferred destination for investment both by foreign and local companies especially IT&ITES. Following policies deserve special mention:
- Setting up of an independent IT Department headed by a Minister in 2000 after the State declared its IT policy.
- Declaring IT service as emergency service as hospitals and making strikes or any other legal action illegal for such enterprises.
- Exempting ITES units from laws governing working hours in establishments – these units were allowed to work for 24 hours in three shifts round the year.
- Setting up institutions like WEBEL (West Bengal Electronics Industry development Corportion) which act as single window support centre for all foreign and local IT investors in the state. It interacts with other government bodies such as Bharat Sanchar Nigam Ltd (for fast-line connectivity), West Bengal State Electricity Board (for power connections) and the local municipality (for building clearances) to reduce the company's exposure to bureaucratic problems.

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Challenges of the Modern World - Contemporary Economy and Globalization

SAVING THE EURO: CREATING SOCIAL REGIONAL CURRENCIES, TAXES ON FINANCIAL TRANSACTIONS, AND MINIMUM INCOME PROGRAMS

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ABSTRACT
This paper proposes the creation of regional currencies, which we call social currencies (pesetas, dracmas, liras; deutsche mark) with the finality of financing minimum income programs and microfinance programs in Europe. The backing for this currency will be Euros collected based on the creation of taxes on regional financial transactions. Depending on the tax rate the amount of money collected can be substantial and can be used to buy to buy government bonds of countries with severe funding problems.

Keywords: *Basic income, Minimum income, Quantity theory of money, Social currencies, Taxes on regional financial transactions, Tobin tax*

1   INTRODUCTION

In all the proposals that we have read so far to solve the European crisis, not one submitted what we believe to be an essential element: the creation of regional currencies, which we call social currencies; the name could be better but what we have in mind with this name is that this currency includes an essential social component, which is job creation; there is nothing new with alternative currencies that circulate side by side with the national currencies of countries with monetary problems, and this has already occurred in Brazil with the creation of social currencies of restricted circulation, as well as in Argentina, when the population lost its confidence in a currency subjected to ongoing and significant devaluations.

These currencies should reflect three features: the first is that the exchange rate should devalue against the euro, as one of the latter's problems is that it prevents competition by countries with less productivity, as we have already argued in an article (Basso, 2005) on exchange rate parities (criticizing the Brazilian real/US dollar exchange rate which was at the origin of the real plan); the second is that these currencies are of a transitory nature and will become extinct when economic conditions improve in European countries; the third is that as opposed to what happened in countries that created social currencies (where creation and emissions were private) creating and issuing will be under the control of central banks in order to prevent counterfeiting and unrestricted emissions.

The backing for this currency will be Euros collected based on the creation of taxes on regional financial transactions. We put forth a similar proposal in a previous article but our concern in that text was to collect funds in order to put in place a minimum income program for those people affected by unemployment; currently the focus is another, as the social currency is intended to reactivate the economy as well as to fund a minimum income. The second essential component in our proposal is the creation of a minimum income for those affected by unemployment; this minimum income would be funded by social regional currencies, issued in accordance with each country's needs; this would not be inflationary for two reasons: recent events in the United States have raised a query on the expertise of

defenders of the quantity theory of money (significant emissions do not result in significant inflation); frugal emissions give rise to product increases (consumer goods in this case).

The second essential component in the proposal is the introduction of regional financial transaction taxes, because we have found that countries such as England will veto the creation of a Tobin tax for the whole of Europe; this tax, as found when implementing the CPMF (provisional contribution on financial transactions) tax in Brazil, has an excellent collection potential depending on the tax rate, and may provide funds to partially remedy problems with budgetary deficits, reducing the debt/GDP ratio to satisfactory levels. The Brazilian experience shows that there is nothing destabilizing about enforcing this tax.

Implementing this tax should form part of a broader proposal to regulate financial resources in European countries (the most appropriate expression would be regulation of financial resources), as the very much commented solution for the social welfare state did not occur.

2 DIAGNOSIS

Replacing national currencies by Euros was one of the European Union's relevant events, as it allowed countries to prepare a group of policies to preserve the currency's stability, while at the same time avoiding the detrimental effects of solving problems at the expense of neighbors. Nonetheless, the fact that there are economies with different productive bases (such as Germany, one of the world's most powerful economies, and Greece, which depends on its agricultural base) leads to productivity being widely different and affecting competitiveness in a number of fields in different nations. This fact has led nations to use the public sector to solve short-term problems, forgetting that only a competitive productive base will be a definite solution for their problems. Recurring public deficits to drive the economy will always charge a price if they are not followed in the long run by an increase in the government's tax basis, as has occurred now; moreover, this increase can take place only if the economies are able to compete to create revenues. This is equal to wishful thinking if the economies do not work in improving productivity, which can only take place by changing the productive base and with recurring investments.

3 THE PROPOSAL

Let us assume that a country has income that can be spent by consumers, equal to 100 Brazilian Reais per annum.

Let us also suppose that circulating this income through banks could result in the public sector collecting 10 Brazilian Reais per annum as contributions on financial transactions (a simplified version of the Tobin tax). This contribution is nothing more than the provisional contribution on financial transactions (CPMF) that existed in Brazil's and Argentina's tax systems; the provisional contribution on financial transactions could be converted into a permanent contribution on financial transactions (we will preserve the same acronym to name the permanent contribution).

Let us assume that in order to back all of this anti-hunger currency, from now on named citizenship currency, the CPMF would be adopted, and the most that the government could print in this currency would be 10 Brazilian Reais, in other words, a monetary unit of the citizenship currency would be equal to one unit of Brazilian currency, the real.

Table 1 illustrates what would happen, proving that no currency would be created. As the poorer people do not have bank counts, this plan is certainly an income reallocater.

We will describe in detail the process's complete steps. To begin with, the Government will issue the equivalent of 10 Reais in citizenship currency and transfer (1) to the impoverished (although this is an important discussion topic, it is not in our scope here to discuss which of the poor will have priority treatment; the issue is complex, as an individual with a scarce income may be in worse condition than an individual not connected to the market economy, such as an Indian or an inhabitant of the Amazon region who makes a living from natural resources).

The sum transferred in this first plan should be equal to the sum collected through the permanent contribution on financial transactions (CPMF).
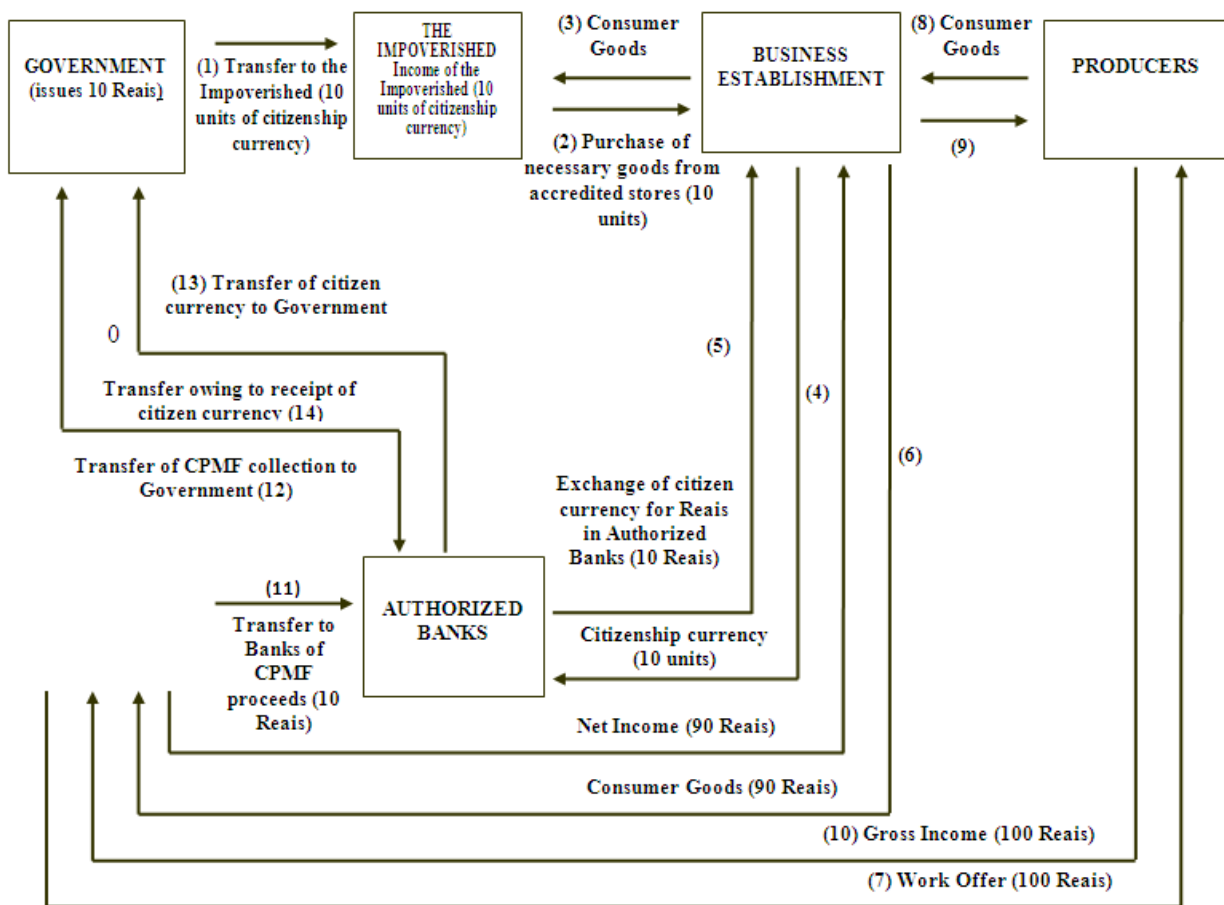
Figure 1: Issuing and Circulating Social (Citizenship) Currency (Basso)

In order to simplify, we will assume that one unit of citizenship currency is equal to one real. To start with, this currency could be spent on food only (this assumption will discarded further on, with an argument in favor of expenditures with consumer goods, whether or not durable, or even any other kind of goods).

The unemployed having in hand a sum due to them will go to stores that sell food, (2) which would retain the food currency while at the same time transferring consumer goods to the

unemployed (3). These stores will exchange the citizenship currency for CPMF tax collection in financial institutions (4) and (5).

The population with income, which at the start had 100 Reais in income, now has available 90 Reais with this income's financial transactions and the taxation on it (CPMF). The population uses up the 90 Reais in consumer goods in the retail stores (6).

The population's income originates from the provision of work to producers totaling 100 Reais (7), who produce consumer goods totaling 100 Reais. The reader, who was brought up under the principles of a classic economy, might inquire why we omitted the creation of value in production, one of the greatest discoveries of classic economists. This was done in order to simplify the reasoning, but no producer would produce if the value going into the productive process is the same resulting from the same process.

Producers sell consumer goods totaling 100 Reais to retail stores (8) and receive 100 Reais, (9) which is used to pay for the work by the population with income (10).

The banks will be in charge of retaining the CPMF funds due by the population (11).

They transfer to the Government the citizenship currency obtained from the retailers (13) at the same time that they transfer the CPMF funds to the government (12) and receive 10 Reais for transferring to it the citizenship currency (14).

Under the proposed plan, the only two unilateral transfers take place between the Government and the impoverished, and the population and the banks.

For all other transfers the path has two ways, i.e.: money is transferred from one point to another in the system, at the same time that goods or work are involved in the opposite direction.

Money issued by the Government, which is equal to creating legal tender, is offset by withdrawing income from the population through the CPMF.

It could be argued that as the money was issued before taxation, there is a likelihood that this plan is inflationary, but in truth taxation occurs during the same time span as issuing, so offsetting exists.

Albeit the currency emission is prior to taxation of the population, increased expenditure due to the excess currency (equal to 110 Reais) giving rise to a price increase, would be offset by a subsequent downturn in demand for money (equal to 100 Reais), leading to a decline in prices.

This first plan is extremely stringent, forcing retail stores to go to the banks to exchange citizenship currency for CPMF funds. This would avoid the creation of legal tender.

A milder alternative may be visualized in the structure of the "barter market" in Buenos Aires. This market, not really a barter market, arose as a result of the crisis that has overcome Argentina, where the unemployed need to exchange what they produce over a period (flow of wealth produced) and even a part of their acquired wealth (stock of acquired wealth) in order

to meet their basic needs (an expression with a connotation broader than satisfying hunger). Each participant in this market receives a number of credits, depending on what he/she has to offer.

With these credits in hand, the person will search for the goods required, validating with payment (using credits) the private labor embodied in other goods.

As the credits are widely accepted and can validate private labor, they serve as a general equivalent and are therefore legal tender. The difference of what occurs in this market and the use of citizenship currency in the first plan is that now validation is broader, including not only wealth produced over the period but inventories from previous periods, which raises the question of what would happen with the citizenship currency's value in connection with the Argentine peso (or the real if the plan were to be introduced into Brazil).

In Argentina's case, the "barter market" has already replied.

One credit unit is worth two pesos, confirming in fact what economists who believe in productivity as the exchange rate's determining factor have already demanded for a long time: The peso's devaluation vis-à-vis the US dollar.

We would not run the risk of increasing the discount, producing inflation in the citizenship currency.

Not if the number of credits (i.e.: the citizenship currency) can be kept under control and regularly exchanged in banks, in accordance with a discount specified by the market. If the goods could be exported, the discount would make the goods produced for bartering more attractive than those in the formal economy, quoted in Argentine pesos. A third more daring plan consists in the creation of a citizenship currency and allowing loans to be made in this currency, provided that they were granted under micro-credit programs, to expand the supply of food. We can use Milton Friedman's argument to demonstrate why this plan is not inflationary.

4 SEVERAL COMMENTS ON THE QUANTITY THEORY OF MONEY
The simplest version of the quantity theory of money may be expressed as:
In which:

$$M.v = P.Y$$

M = stock of means of payment, i.e.: paper money in the public's possession plus its sight deposits in commercial banks.
v = the currency's velocity of circulation
P = a price index, and in the case of the entire economy, the product's implicit deflator
Y = index for real product

This equation may be converted into a dynamic equation representing variations in time.

The variables may be named:

$$\frac{\Delta M}{\Delta t} . \frac{1}{M} = \widehat{M}$$

$$\frac{\Delta P}{\Delta t} \cdot \frac{1}{P} - \hat{P}$$

$$\frac{\Delta Y}{\Delta t} \cdot \frac{1}{Y} = \hat{Y}$$

$$\frac{\Delta v}{\Delta t} \cdot \frac{1}{v} = \hat{v}$$

And considering a constant velocity of circulation, we will have the equation:

$$\hat{M} + \hat{v} = \hat{P} + \hat{Y}$$
$$\hat{M} - \hat{P} + \hat{Y}$$

Based on the scenario expressing the relation between gross domestic product and the amount of currency required to achieve this, we can devise at least five theories.

Three theories are devised based on the additional assumption that the velocity of circulation is constant and that the cause of inflation is an increase in the volume of money in the economy (the currency is the root of price rises).

The first of these, which we might name short-term Friedmanian, provides that the additional stock of currency will be divided between a price rise and an increase in real product. Acting prudently, the volume of currency may be increased in the same proportion as real product estimated growth. This increase may be provided by social (beneficial) currency. We might argue that short-term growth will not imply inflationary pressures if expenditures come together with increases in the gross formation of fixed capital, creating additional goods and services.

The second theory, which we might name Keynesian recessionary, upholds that an increase in supply will impact real growth only, as in depressed economies the monetary stimulus will not produce inflation as the first reason is to recover the economy from a depression (or recession). There is a parallel between this theory and what is currently happening in Europe and the United States, with massive currency emissions to recover both continents from a recession. As upheld by the Keynesian theory, expressive currency emissions may not impact on product should the process occur known as the liquidity trap. Even when unrestricted currency is available, families will not spend should they feel a threat of losing their jobs during a recession, and businessmen will not invest if they do not foresee generous times ahead to sell the goods resulting from their investments.

The third theory applies to situations in which the economy uses a significant enough portion of productive capacity and is close to full employment. In this situation, increases in the supply of currency will result in price rises as it is not possible to increase product.

A fourth version of the quantity theory assumes that the chief cause of price rises is a currency increase, but changes the velocity of circulation. This seems to be the expectation by the US, expressive increases in the volume of currency are not being converted into inflation, due to a change in the currency's velocity of circulation in a direction opposed to the increase in the volume of currency.

Under the same scenario, there are two more theories that change this cause and effect relation. We might name them Marxist and Keynesian.

In both of them, increases in the volume of currency arise from price rises and greater quantities.

Keynesian theories explain prices with mark-up theories. Once mark-ups and quantities for production are decided, products (gross domestic products) will be determined (prices multiplied by amounts). Products determine the volume of currency to realize them. Should the amount of currency be sufficient to make products, the velocity of circulation will not change. Should the amount of currency prove insufficient, the velocity of circulation will rise. Should the amount of currency be excessive, this will affect the currency's velocity of circulation. What distinguishes Marxists from Keynesians is the micro-economic theory that explains price levels, with Marxists adopting the labor theory of value and Keynesians using the surplus theory based on goods (Sraffa) or the utility value theory.

In summary, there are several theories advocating that an increase in the amount of currency is not inflationary, and these theories support the creation of social (beneficial) currency.

5   THE TOBIN TAX
The funds for a stricter plan of creating a social currency (without issuing any amount of currency) would originate from a Tobin tax.

There are a number of versions of a tax on financial transactions, implying various amounts in proceeds. One version involves taxation of foreign exchange markets (Kapoor, 2004). Our purpose here is not to discuss the best form of taxation on currency transactions, but to argue in favor of a successful one, the CPMF's effectiveness in Brazil with a relevant collection of funds. The CPMF is a tax applied to any financial transaction within the country. The volume of funds collected may be significant depending on the tax rate, with the advantage of not requiring international agreements to be enforced. As England did not enact the Tobin tax, the solution is found in domestic CPMFs. This tax is certainly regressive, as its rate is incident on all income brackets. I uphold that this tax is of a nature that supplants the disadvantage of a regressive nature, with its implicit dimension of solidarity; all of a country's inhabitants should be granted the means of eliminating hunger, and this is a task for all of a country's inhabitants.

6   THE USE OF MONEY
Tobin's initial proposal was to reduce the volatility of international capital flows, considered in the past to be destabilizing (Basso, Pinho and Silva, 2001).

We now know that capital flows are much more difficult to control when the prospects of returns are spectacular. We give an example: one of the explanations for the sub-prime crisis in the United States sustains that the huge deficits in the US balance of payments caused the crisis. The huge deficits led to incoming funds by means of the capital account, which led to growing investments, consumer spending, and indebtedness by families at levels not compatible with a balanced position.

We can foresee expenditures of the Tobin tax in numerous activities, depending on the problem we wish to grasp.

a. implementation of a minimum income program: countries suffer the impact of crises in different manners; Spain is undergoing extremely high unemployment rates; in this case the proceeds would be allocated to minimum income programs;

b. incentives to change the energy matrix: some forms of energy are deemed to be too expensive; an example is solar energy; some countries such as China are able to produce equipment for using this form of energy much more cheaply than those produced in western countries; the funds would be employed to subsidize acquisition of this equipment, still considered expensive; these funds could also be employed to produce this equipment in western countries at prices subsidized by the Tobin tax;

c. micro-credits to organize small businesses: minimum income is effective over consumer activity; an alternative is to encourage the formation of gross investment capital by small entrepreneurs, with a view to job creation;

d. changes in transport infrastructure: this is an extremely necessary use of funds in emerging countries such as Brazil (and other Latin American countries), which ignored railway transportation.

I will explain with an example. Table 1 reflects a series of revenues that we deem relevant to fund railroad transportation (taken from an end-of-course paper by Karine Bincoletto (2010). The first column shows current revenues for two metropolitan regions in the state of São Paulo (Campinas and São Paulo). As these are two very populous regions, the sums would be employed to fund the railroad system in these regions. The percentage in question will be 1%.

The second column reflects taxation on motor vehicles. As vehicles contribute to degrade air quality, the percentage in question will be 10%.

The third column refers to revenues from the state of São Paulo's value-added tax (ICMS tax). As the railroad system produces positive externalities, 1% of the entire state's revenues will be allocated to build the system in two regions. The fourth column shows a Brazilian version of the Tobin tax (CPMF – provisional contribution on financial transactions). In Brazil the tax rate was high (0.38%) and we allocated 21% to build the railroad system, which represents the state of São Paulo's share in Brazil's population.

An alternative step was the idea of using a portion of the state of São Paulo's IPVA (motor vehicle tax) revenues to reactivate railways. The idea is to allocate 10% of this tax to build the São Paulo – Campinas railroad. As for the ICMS tax collected in the state of São Paulo, 1% of its value will be employed in the construction. With regard to the ICMS tax, a sum was calculated to be allocated to the state of São Paulo if the criterion were based on population. And by means of the figures found, it is possible to calculate how many kilometers could be built by means of these three methods.

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Table 1: Percentage of sums from sources of funding – (data in Brazilian Reais for 2008; Bincoletto and Simone, 2010)

	CURRENT REVENUES*	IPVA**	ICMS***	CPMF****
TOTAL	42,463,513,954	8,789,600,000	77,202,300,000	36,483,000,000
PERCENTAGE	424,635,140	878,960,000	772,023,000	7,661,430,000

* 1% of current revenues by the municipalities in the metropolitan region of São Paulo and Campinas for 2008; ** 10% of the sum collected by the state of São Paulo for 2009; *** 1% of the sum with regard to the state of São Paulo for 2009; **** sum equal to 21% of the total CPMF, the state of São Paulo's percentage share in the country' population.)

Table 2 demonstrates costs per km of three kinds of railway transportation, monorail, light rail vehicle, and high-speed train.

Table 2: Costs per km for the three railway modals (Bincoletto and Simone, 2010)

COST PER KM	
MONORAIL	R$ 75 MILLION
LRT	R$ 66 MILLION
HST	R$ 67.7 MILLION

Lastly, table 3 gives an approximate idea of how many kilometers could be built, and was obtained by dividing the contribution from each source (current revenues, ICMS, IPVA CPMF) by the cost per km for each kind of railway transportation (as an example, with 1% of current revenues we could build 6.4 km annually for a light rail vehicle, 6.3 km for a high-speed train, and 3.3 km for a monorail.

Table 3: Estimate of kilometers built for each kind of railway transportation (Bincoletto and Simone, 2010)

	MUNICIPAL CURRENT REVENUES	IPVA	ICMS	CPMF
LRT	6.4 KM	13.3 KM	11.8 KM	116.1 KM
HST	6.3 KM	13.0 KM	11.4 KM	113.2 KM
MONORAIL	5.7 KM	11.7 KM	10.3 KM	102.1 KM

These sums evidence that the option for rebuilding the railroad system is more political than financial, as funding can be obtained.

Use of the four sources of funding (in amounts that could be supported by the municipalities and the state government) would allow building 147.6 km of light rail vehicle tracks, 143.9 km of high-speed train tracks, and 129.8 km of monorails.

As we have upheld that the production of commodities embodies in the system's own concept the likelihood of crises, because all goods need to perform their *salto mortale*, we consider it prudent to include other forms for the system to function, apart from the production of commodities. To reduce the burden on public budgets, this great effort to rebuild the railway

system could employ the work of the prison population in the state of São Paulo, which would earn less but on the other hand would have their sentences reduced, and could work as employees of public-private railroad systems.

There are other serious structural problems in Brazil, such as the system for gathering and treating sewage, which does not cover significant portions of the inhabitants of Brazilian cities and gives rise to a loss in environmental quality, as the waste is dumped in rivers; This is a problem that requires an urgent solution and the proposal outlined here could contribute with part of the funds (Basso, Pinho and Silva, 2001).

7 CONCLUSION

If there are funds to rescue and save banks (salvage financial capital), there should be funds to save persons. As the socialism that we know has killed individual liberties and created brutal dictatorships (the Soviet Union, Cambodia, east European countries) that took the lives of millions of people, and capitalism has proved to be a perverse system that has created millions of unemployed and progressively degrades the environment, the need arises to think and propose alternatives to partly replace the production of commodities, that as Marx showed brings in its conception the likelihood crisis. The plan outlined is a proposal in this direction.

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THE STABILITY ASSESSMENT IN SOCIAL NETWORKS

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ABSTRACT
The research is based on the consideration of social networks in terms of network games. We formalize interpersonal relations using the methods of structural and social analysis combined with game theoretic approach. Specifically, we formalize social power of an agent and use it to quantify payoffs. Based on reasoning over values of power we show how individuals reach stability with their peers in network games.

Keywords: Network games, Social power, Network stability

1   INTRODUCTION

The framework of the research is based on the problem of modeling the effects of network games on social reasoning based on the game theoretical approach.

A social network is considered as an n-person nonzero sum game. Basically, each agent is characterized by structural metrics (i.e., centralities) and by social characteristics, such as measure of trust to other players.

Since game theoretic methodologies are well adapted for socio-economic modeling, the representation of a social network in a game form can provide beneficial effects (Jackson, 2008). Game theoretic methods can be used for the formalization of agents and their relations in social networks. Each agent can be considered as a player and agent's benefits or losses can be represented as a player's payoffs. In fact, each player attempts to maximize or minimize its payoff by strategizing (Barron, 2007). Since each player chooses the extent of trust to another player, we consider a player's choice of the level of trust as a strategy. Application of game theory in social networks optimizes the balance of interaction among individuals. For example, game theory provides a network with stability or equilibrium (Barron, 2007).

The main idea of the research is to adapt the formalization of the interdependencies among structural and social factors for the game theoretic representation and analysis of gaining stability for the social network game.

2   BACKGROUND

The basic mathematical formalization of social networks is based on principals and methods of graph theory and game theory. Specifically, Jackson (2008) characterized the dynamic behavior of network agents using different approaches, such as Markov chains, multiple equilibrium, local public goods model (Bramoulle and Kranton, 2006), games in normal forms, and dominant strategies. Jackson (2008) began his book with the description of the fundamental analysis of social and economic networks. It includes an explanation of networks representation and measuring with graph theoretic methodologies. Next, the author gave the

analysis of network models including static random-graph models and hybrid models. On each step of the analysis, Jackson (2008) gave a detailed explanation of different network properties and measures, such as socio-economic externalities, network stability, clustering, distance-based utility, and network efficiency. The analysis of social and economic network processes is combined with mathematical and logical formalization of network components. In addition to structural analysis, Jackson (2008) characterized social and economic networks in terms of game theory. It includes the description of basic game theoretic measures, properties, and methods. Defining stability and equilibrium as the basic characteristics of a game, Jackson (2008) provides the analysis of practical application of these measures in socio-economic network modeling. Jackson (2008) gave a general analysis of social and economic networks using the classic apparatus of game theory. The combination of social, economic, graph theoretic, and game theoretic principles is described in a comprehensive manner. Another advantage of the book is that each step of a theoretic analysis is supported by practical exercises for the deeper understanding.

Another way to formalize social networks is to use game theoretic methodologies. Game theory is originally adapted for the analysis of social-economic problems. The analysis of game theoretic concepts is done by Barron (2007). According to Barron (2007) games are invariable part of all interpersonal relations. People's daily life is related to the participation in different social and economic games. For example, a person can be a member of a university community playing the social role of professor or student. Also it can be a member of a family playing the social role of father or grandfather. The formalization of interpersonal games is described in Barron (2007). The book is based on the sequential analysis of game theoretic concepts. First, it includes the description of classic matrix two-person games. This part includes the formalization of mixed strategies, dominant strategies and the explanation of graphical solutions in two-person games. The explanation of theoretical aspects is provided with specific examples. For example, Barron (2007) described how the game of Russian roulette can be formalized using a game theoretic approach. Barron (2007) included the analysis of matrix games combined with linear programming and simplex method. Representation of practical application of game theory is done by the explanation of the model of economic growth. The next part of the book is related to two-person and n-person nonzero games. The analysis is based on the consideration of bimatrix games and nonlinear programming methods. N-person nonzero sum games are characterized in two aspects: (a) games with complete information and (b) games with incomplete information. Next, Barron (2007) described the concept of Nash equilibrium including its definition, formalization and practical application. Barron (2007) analyzed how to gain Nash equilibrium considering the specific economic problems. The final part of the book includes the description of cooperative games. The analysis of cooperative games is based on the consideration of specific examples with different types of solutions (i.e., graphical solutions, logical reasoning, and mathematic calculus). In general, the book is written in a comprehensive manner. All theoretical concepts are explained by the consideration of specific problems.

One of the advanced studies related to game theory was done by Camerer, Ho and Chong (2001). They investigated the specific branch of game theory – behavioral game theory. It is based on the analysis of how agents are thinking and learning during the games. According to Camerer et al. (2001), there are three goals of the research. The first goal is to formalize the rationality of the interpersonal relations. It implies the consideration of a specific index. The values of this index correspond to the levels of rationality of agent's interactions. Rationality is a measurement of an agent's way of thinking (Camerer et al., 2001). It implies the

measurement of a probability that agent will act in a predicted way. The second goal of the research is to develop a mechanism for the gaining of equilibrium in games. The mechanism is based on the specific algorithm proposed by Camerer et al. (2001). Based on reinforcement and belief learning, the algorithm shows a high accuracy in six of seven testing games. Also, research includes the estimation of the given algorithm. The third goal of the research is to analyze changes the nature of player's behavior using the combination of the proposed algorithm and rationality index.

An important factor of network games is trust. Trust can be considered in the context of interdependencies between social power and game playing strategies (Solomon, 1960). This study is based on the idea that interpersonal trust and interpersonal power are closely related to each other through the term of social power relationships. Solomon (1960) considers a nonzero-sum game, where each player can be in one of three states (absolute power, partial power, and equal power) and can choose one of three strategies to play (a) conditional cooperation, (b) unconditional cooperation, and (c) noncooperation. The main challenge for Solomon's research is to investigate the influence of power relationships and game strategies on the interpersonal trust. Solomon (1960) considered the interdependence between trust and suspicion. If agent B is suspected by agent A in some kind of negative or unpredicted behavior, then the level of trust from agent A to agent B will be decreased corresponding to the level of suspicion. Solomon (1960) associates social power with interpersonal power. Interpersonal power is based on the idea of an agent's ability to motivate other agents to act in the desired way.

Another research related to the analysis of interdependencies between trust, social networks, and game theory is performed by Berg, Dickhaut, and McCabe (1995). This research is based on two principles of the interpretation of trust. First, trust is considered as an agent's property that encapsulates the accumulation of an agent's reputation in a set of games. Reputation is a multi-factor parameter of interpersonal relations. It includes social and economic factors. The second interpretation of trust is related to the strategizing processes. According to Berg et al. (1995), trust is a strategy that is characterized by the stability of trust variations in a sequence of games. For example, agent A is characterized by a stable trust with respect to agent B if the level of trust does not deviate from the average level of trust between agent A and agent B in a sequence of n games. The research is related to the economic interpretation of trust. Specifically, Berg et al. (1995) analyzed trust in terms of investment games, which are well-formalized in terms of game theory. Games are considered in two aspects. The first aspect implies the consideration of games where players do not have a social history, which is a property of a social network that characterizes players' ability to exchange information regarding the use of trust. This means that agents remember how they trusted each other in a set of games. Therefore, the games with social history are characterized by an agent's ability to analyze the relations (i.e., trust) with other agents in the past and make decisions regarding the future strategies based on this analysis. Another type of game considered by Berg et al. (1995) implies the analysis of games with an absence of social history. This means that an agent cannot keep information regarding the exchange of trust between other agents. According to Berg et al. (1995), social history is an important characteristic of games because it strengthens the correlation between trust and reciprocity. Reciprocity is considered as an agent's ability to interact with other agents using the knowledge about the interpersonal trust. In general, the given research includes a good explanation of interdependencies between trust and reciprocity in terms of game theoretic methodologies.

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3   METHODOOGIES

3.1   Game Theory

Game theory is a study that is based on the idea of rationalization of players' activities (Straffin, 1993). Essentially, a game is based on three concepts: players, strategies, and payoffs.

Strategy is at the core of game theory, and each player has its own set of strategies. Basically, strategy is a player's plan on how to act. Strategy can have different natures, but the core of any strategy is an opportunity for the player to choose how to act. For instance, a player can choose how much money it can lend to other players or it can choose the level of trust to other players. In fact, this process of making a choice is a strategizing process.

Depending on the set of the chosen strategies, each player gets a payoff. Payoff is a result of a player's activity according to the chosen strategy (Barron, 2007). The main player's goal in the game is to maximize or minimize its payoff. Agents' payoffs are usually represented in matrix form. An abstract payoff matrix is represented in Figure 1.

		Player X	
		K	L
Player Y	M	a,b	c,c
	N	h,h	b,a

Figure 1: An Abstract Payoff Matrix of Two-Person Game

According to Figure 1, there are two players: player X and player Y. Each player has two strategies. K and L are the strategies of player X. M and N are the strategies of player Y. Depending on the chosen strategy, agents get corresponding payoffs: a, b, c or h. For example, if agent Y chooses strategy M and player X chooses strategy K, then players Y and X will get a and b payoffs respectively. The process of payoffs maximization or minimization is the main purpose of strategizing.

3.2   Types of Games

Game theory includes different types of games. The basic classification is represented in Figure 2.
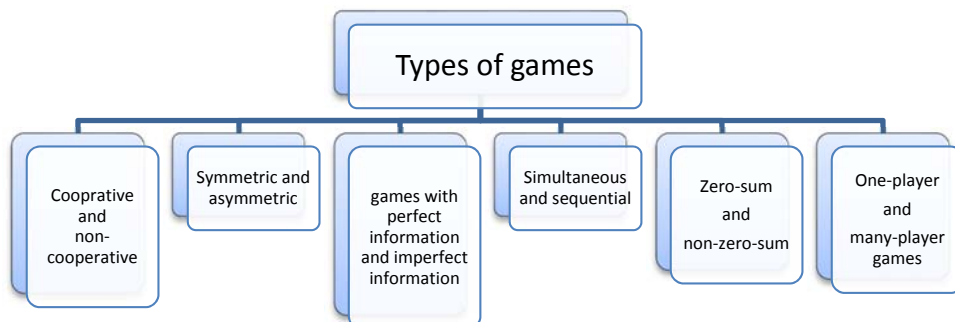
Figure 2: Types of Games

Cooperative games are the games where agents are united in coalitions. The coalition goals have a higher priority than the individual agents' goals. It means that a group of agents try to maximize or minimize its payoff due to the coordinated work of its agents. Deep analysis of cooperative games is done by Nash (1953). It includes the consideration of players' cooperation in terms of classical two-person games.

Agents can have a different level of interest regarding the coalition purposes. Trivially, an agent is not interested in the group's goals, and it tries to maximize or minimize its individual payoff. In this case, a coalition payoff is an overall result of all individual agents' payoffs. However, this trivial type of cooperative games does not correspond to the real socio-economic situations. The most common approach is to consider a cooperative game where each agent has a specific role. It implies the distribution of agents' roles within the corresponding cooperation. It means that payoff maximization or minimization is not a required purpose of the agent's strategizing, because the primary agent's purpose is to maximize or minimize a total coalition payoff.

Non-cooperative games are based on the maximization or minimization of the individual agents' payoffs. Agents follow their own interests and do not form any groups in such kinds of games. In fact, a non-cooperative game is a game where each cooperation consists of one agent. The description of non-cooperative games is also done by Nash (1953).

Symmetric game is a classical game theory approach. It is based on the idea that, if we swap the position of the player A with the position of another player B, then player A will get the same payoff as it could get without swapping. An example of symmetric game is a prisoner's dilemma (Plous, 1993). However, the majority of games are asymmetric, because players are individualistic. Each player has its own view regarding the game and different strategizing. Accordingly, each agent has a specific payoff matrix.

Games with perfect information are the games where each agent knows the history of strategizing and payoffs of all opponents in the set of games. Mostly, socio-economic modeling is based on the games with imperfect information. The main reason is that it is almost impossible to provide absolute information awareness to all players about each other. Games with perfect information mostly used to model well-formalized problems. One of the good approaches related to the analysis of games with perfect and imperfect information is done by Harris (1985).

Simultaneous and sequential games are characterized by the agent's knowledge about the opponent's strategy choice (Gal-Or, 1985). In simultaneous games, an agent does not know about the decisions of other agents. It means that an agent has to choose the strategy without any knowledge about the opponent's strategizing. Simultaneous games are closely related to the games with imperfect information, because an agent does not know the history of opponents' strategizing and payoffs. Conformably, sequential games are based on the idea that each agent is knowledgeable in the strategizing and payoffs of other agents. An agent makes a decision how to act only when the opponent's decision is done. It does not mean that an agent is informed about all decisions and payoffs of other agents, but it means that an agent can be partly or fully informed about the current state of the game.

Zero-sum and non-zero sum games are based on the relations between increasing and decreasing of agents payoffs. In zero-sum games, a gained amount of an agent's payoff is

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equal to the amount of opponent's lost payoff (Barron, 2007). Zero-sum games characterize two-person games where the payoff u_A of agent A is opposite to the payoff u_B of agent B (i.e., $u_A=(-u_B)$). In non-zero sum games, the amounts of an agent's payoffs are not opposite (Barron, 2007). An overwhelming majority of non-zero sum games are the games with two or more players. Accordingly, depending on the number of players, there are one-player and many-player games.

3.3   Nash Equilibrium

Nash equilibrium is one of the central components of game theory. Nash Equilibrium invention is based on the conceptions that were discovered by Neumann & Morgenstern (1947) for zero-sum games. However, the unified formalization of Nash equilibrium for non-zero sum games was done by Nash (1951).

Nash equilibrium is a specific state of a game (i.e., set of strategies and payoffs of all agents) when player cannot improve its own payoff unilaterally without the consideration of strategies and payoffs of other agents. If an agent tries to improve its payoff, then all other agents should reconsider their strategies and make a decision regarding their new strategies. It is required that each agent takes into consideration the strategies of all other agents to keep the game in Nash equilibrium. Nash equilibrium does not guarantee that each player maximizes or minimizes its payoff (Barron, 2007). Nash equilibrium gaining is not a problem of payoffs maximization or minimization. The basic idea of Nash equilibrium is that it ensures to each agent a minimum payoff. Each agent knows a priori (i.e., before the beginning of the game) that it will always get a fixed amount of payoff regardless of the game's results. For example, we can consider an abstract two-person game with players A and B. No matter which strategies will be chosen by agent A during the set of games, agent A will always get an amount of payoff that is more than or equal to the guaranteed one.

According to Barron (2007), Nash equilibrium of n-person non-zero sum games is a set of strategies that is represented in equation 1.

$$q^* = (q_1^*, \dots, q_n^*) \, \epsilon \, Q_1 \times \dots \times Q_N \tag{1}$$

The optimized combination of strategies (equation 1) corresponds to the set of payoffs $\{u_i(q)\}$, where i is an agent's number (Barron, 2007).

According to Barron (2007), Nash equilibrium of n-person game can be gained if inequality represented in equation 2 is satisfied.

$$u_i(q_1^*, \dots, q_{i-1}^*, q_i^*, q_{i+1}^*, \dots, q_N^*) \geq (q_1^*, \dots, q_{i-1}^*, q_i, q_{i+1}^*, \dots, q_N^*) \; where \;\; q_i \, \epsilon \, Q_i \tag{2}$$

There is no universal mechanism of Nash equilibrium gaining. Every specific game has its specific features. Nash equilibrium of many games usually can be gained using the combination of mathematical calculus and logical reasoning.

3.4   Network Games

Network games are a combined approach that is based on the structural analysis of socio-economic networks and game theory. Players and their interrelations form a network that can be represented as a graph. Network games are based on the extended analysis of players' interdependencies. Such approach implies the symbiosis of graph theory and game theory

methodologies for the purpose of more adequate analysis of socio-economic relations. According to Jackson (2008), network game investigations are based on four basic factors: player's degree d, player's probabilistic property $\sigma(d)$, utility function u_d, and agent's strategy x_i.

A player's degree is a structural measure. It corresponds to interdependencies between agents in terms of graph theory. A player's degree is an estimated number of an agent's relations with other agents. In fact, it corresponds to the number of directly connected nodes of graph, where each node is a player. An agent's property $\sigma(d)$ is a probabilistic characteristic of an agent i with degree d. It is a probability that a neighbor of agent i will choose a specific strategy (Jackson, 2008). The values of $\sigma(d)$ are in the range [0, 1]. According to Jackson (2008), agent's utility u_d is its payoff based on the current degree d, probabilistic property $\sigma(d)$ and the chosen strategy x_i. Jackson (2008) considers network games in terms of manipulations with these three basic factors (i.e., d, u_d, and $\sigma(d)$) for the purposes of network stabilization and Nash equilibrium gaining.

Another network games analysis is done by Galeotti, Goyal, Jackson, Vega-Redondo and Yariv (2010). It is based on the idea that a player's payoff depends on the structural state of its neighbors. Galeotti et al. (2010) also considered network games in terms of combined methodologies of structural analysis and game theory. Galeotti et al. (2010) gave a mathematical interpretation of such kinds of interrelated methodologies. They consider network games with incomplete information about network structure. The formalization of agents' payoffs is based on the correlated analysis of three basic aspects: (a) structural centralities, (b) information incompleteness, and (c) network externalities.

4   APPROACH

4.1   Game Theoretic Approach
The analysis of social network games in terms of game theory is based on the idea of finding stability or equilibrium for combinations of players' strategies.

In terms of given research, stability is considered as the state of network games when the specific combination of player's strategies can ensure a certain condition of the network game. Equilibrium is considered as Nash equilibrium.

The proposed work is based on the idea to consider n-person nonzero sum games. These games can be divided into two types.

The first type is the games with deterministic payoffs, where agent's payoff is a value of social power, and strategy is a value of trust.

We propose the formalization of social power in equation 3.

$$SP_A = \frac{\sum_{i=1}^{N-1} T_{i,A}}{N-1} \times SC_A + \frac{\sum_{i=1}^{N-1}(T_{A,i} \times SC_i - T_{i,A} \times SC_A)}{N-1} \tag{3}$$

Here,
N is a number of agents;
$T_{i,A}$ is a trust from agent i to agent A ($T_{i,A}$ represents values in the range [0, 1]);
$T_{A,i}$ is a trust from agent A to agent I ($T_{A,i}$ represents values in the range [0, 1]);

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SC_A is a structural centrality of agent A;
SC_i is a structural centrality of agent i.

We propose to calculate the values of structural centralities based on the equation 4.

$$SC = AVG\ (DC + BC + CC) \tag{4}$$

where $SC \in [0, 1]$;
DC is a degree centrality (Freeman, 1979);
BC is a betweenness centrality (Anthonisse, 1971; Freeman, 1977);
CC is a closeness centrality (Beauchamp, 1965; Sabidussi, 1966).
The second type is games with probabilistic payoffs, where agent's payoff is a probability to get a specific value of social power and strategy is a value trust.

4.2   Network Games with Deterministic Payoffs

Two basic concepts of the game that have to be determined are agents' strategies ($q=\{q_1, q_2, \dots, q_n\}$) and agents' payoffs ($u_i(q)$, where i=1, …, N).
In the context of the given research, trust is considered as a strategy. A player's strategy construction is a choice process of how to trust other agents. Each agent can choose the level of trust from the range [0, 1]. The given freedom of social choice (i.e., freedom to choose the level of trust) is at the core of strategizing.

An agent's payoff is its social power, and it can be represented by equation 5:

$$u_A = f\ (q_{A,i}, \dots, q_{A,N-1}, q_{i,A}, \dots, q_{N-1, A}), \tag{5}$$

where i is the number of agents that are different from agent A (i.e., $i = 1, \dots, N-1$).
We consider u_A as a function of trusts from agent A to all other agents and from all other agents to agent A. An agent's payoff is equal to value of its SP (equation 3):

$$u_A = SP_A \tag{6}$$

The fact that social power is an equation of two variables (i.e., T and SC) is not an issue in the context of the proposed formalization of social network games, because a player can choose only the level of trust during the game, but not the value of structural centrality. Structural centrality is a structural measure and it does not depend on the player's strategizing. A player cannot choose its structural centrality. Since it is a network structural characteristic it becomes a parameter in the payoff function and its value can vary from one game to another. A player can manipulate only by its social choice (i.e., level of trust), and this manipulation affects social power and structural centrality because of their functional interdependency (i.e., SP=f(T,SC)).

According to Barron (2007), Nash equilibrium ($q_1^*, q_2^*, \dots, q_n^*$) for n-person nonzero sum games can be gained if three conditions are simultaneously satisfied:

1. $\frac{\partial u_i(q_i, \dots, q_n)}{\partial q_i} = 0, i = 1, 2, \dots, n.$

2. $q \mapsto u_i(q_1^*, \dots, q_{i-1}^*, q, q_{i+1}^*, \dots, q_n^*) for\ q \in Q_i.$

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3. $\quad \frac{\partial^2 u_i(q_i,\dots,q_n)}{\partial^2 q_i} < 0, i = 1, 2, \dots, n.$

Figure 3: The Conditions for Nash Equilibrium Gaining

The calculus methodology in Figure 3 can be applied for the social network games with deterministic payoffs. We consider the game with two players for the simplification of the Nash equilibrium computation. The methodology of Nash equilibrium gaining is scalable, and the decision for two players can be applied for n-players.

There is a two-person non-zero sum game, where equation 3 (i.e., SP) is applied for the payoff's computation and stability and equilibrium gaining.

Player 1

$u_1(q_1, q_2) = q_2 \times SC_1 + (q_1 \times SC_2 - q_2 \times SC_1)$

Verification of (a)-condition:

$\frac{\partial u_1}{\partial q_1} = 0 + SC_2 - 0;$

According to (a) and (b)-condition, the solution cannot be approached by the method of derivation. $SC_2 = 0$ (if (a)-condition is applied)

Verification of (c)-condition:

$\frac{\partial^2 u_1}{\partial^2 q_1} = 0 \Rightarrow$ (c)-condition is not satisfied.

Player 2

$u_2(q_1, q_2) = q_1 \times SC_2 + (q_2 \times SC_1 - q_1 \times SC_2)$

Verification of (a)-condition:

$\frac{\partial u_2}{\partial q_2} = 0 + SC_1 - 0;$

According to (a) and (b)-condition, the solution cannot be approached by the method of derivation. $SC_1 = 0$ (if (a)-condition is applied)

Verification of (c)-condition:

$\frac{\partial^2 u_2}{\partial^2 q_2} = 0 \Rightarrow$ (c)-condition is not satisfied.

Figure 4: Nash Equilibrium Computations for a Two-Person Non-Zero Sum Game with Deterministic Payoffs

According to Figure 4, n-person non-zero sum games based on the equation 3 can gain the state of stability. A network game stands in a stable condition if all players have the same level of trust to each other (equation 7).

$$q_1 = q_2 = \dots = q_n, \qquad\qquad (7)$$

where "n" is a number of players.

The desired aim of the research to gain the stability of social network games is reached. According to Barron (2007), the conditions in Figure 4 are sufficient, but, in practice, they are not necessary. Nash equilibrium can be gained even if the conditions in Figure 4 are not satisfied. Therefore, the future work is related to the analysis of the Nash equilibrium that can be gained by a different approach that is based on n-person non-zero sum games with probabilistic payoffs.

4   CONSLUSION

The overwhelming majority of social systems have a dynamic nature. It makes the problem of network games formalization complicated. The condition, behavior, and resources of agents are changing over time depending on the agents' goals and intentions. Therefore, there is a problem with finding a way to synthesize the knowledge about such systems and build a

framework to formalize strategic interactions between agents. One of the modern methods of formalization to solve this problem is to use an interdisciplinary approach that attempts to combine models, mathematical and logical apparatuses and theories of social network analysis, game theory, sociology, graph theory, organizational studies, and beyond.

The formalization of social power as a multi-factor model of an agent's importance, and authority in a social network gives an opportunity to manipulate social networks using game theoretic methods. Specifically, we considered dynamic social networks as the sequences of network games, where players' payoffs are represented by the values of social power, and strategies are represented by the levels of trust to other agents. The formalization of network games based on the invented equation of social power made it possible to approach the stability of network games with deterministic payoffs. It implies the practical importance of the research, because the given theoretical approach can be applied in the monitoring and control of real socio-economic systems.

The future work may be done in the analysis of network games with deterministic and probabilistic payoffs. We approached the stability of games with deterministic payoffs, but another challenge is to gain Nash equilibrium for the games with the various natures of payoffs.

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DEVELOPMENT OPPORTUNITIES OF PORT OF RIJEKA IN THE FUTURE

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ABSTRACT
The aim of this paper was to define the development opportunities of Port of Rijeka as the most important Croatian port. Port of Rijeka has the most convenient natural exit toward the sea and it is a center of Primorje-Gorski Kotar County through which pass branch Vb of the Pan-European Corridor V and the branch Xa of the Pan-European corridor X. One has conducted analysis of the geotraffic position of Port of Rijeka, its traffic and financial analysis (safety indicators and activity ratios). Base for the financial analysis was annual report (balance sheet, income statement and cash flow statement) for 2011 year.

Keywords: *Activity ratios, Geotraffic position, Leverage, Liquidity, Port of Rijeka*

1 INTRODUCTION

Port of Rijeka is the most important port in the Republic of Croatia, and also the biggest port on the Adriatic sea. Among all Croatian ports Port of Rijeka has the most convenient natural exit toward the sea. Its position on the Northern Sea route enables her role of important transit port for the Central and Middle East Europe.

Important characteristic of Port of Rijeka is its closeness to the capitals of neighbour countries (Austria, Bosnia and Herzegovina, Czech Republic, Hungary, Serbia, Slovakia,..) while most of them are from countries with the large overseas goods exchange. As Croatia is entering in the European Union on the 1 July of 2013 Port of Rijeka will finally have equal market conditions as her major concurrents and it will have possibility to enter in the new business transactions.

In aim to define development opportunities of Port of Rijeka one will conduct the analysis of the geotraffic position, analysis of traffic (dry cargo, liquid cargo, container traffic) and the financial analysis through activity ratios and safety indicators.

2 GEOTRAFFIC POSITION OF THE PORT OF RIJEKA

The role of the ports, as a hub of land and sea transportation routes as well as the transshipment places of cargo from one vehicle to another vehicle, significantly expands and diversifies. For business and development opportunities of ports are vital transverse Pan-European corridors that ensure to the ports uniform and modern way to plug in the connection between Central Europe and Middle East Europe (Kesic, Jakomin and Jugovic, 2010, pp. 94–98).

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The port of Rijeka is a port of national interest opened to national and international public traffic; it is conveniently oriented toward the world's seaborn routes. City of Rijeka provides the shortest connection either inland or sea way between Central and Middle East Europe to overseas destinations. The North Adriatic traffic direction is the shortest way by which Europe is connected with the Mediterranean, Suez Canal and the Strait of Gibraltar with the world seaports (Kos, Brcic and Karmelic, 2010, p. 190).

Figure 1: Traffic connections of Port of Rijeka
(http://www.lukarijeka.hr/en/port_handbook/traffic_connections/traffic_connections_/default.
aspx)

The essential factors of the Port of Rijeka geotraffic position are the physical characteristics of its location and its connection with the hinterland (Dundovic, Hlaca, 2007, p. 51). Unique disadvantage of its geotraffic position is that majority of road and rail connections are passing through the center of the town as Port of Rijeka is situated practically in the center of City of Rijeka. There are three Pan-European corridors passing through Croatia: the B and C branches of corridor V, corridor VII and corridor X.

The major traffic corridors for the Port of Rijeka are branch B of corridor V and corridor X (www.lukarijeka.hr). Highways connect Rijeka through Slovenia with Austria (Salzburg) and Italy (Trieste); and with Hungary through Zagreb. The route Rijeka-Zagreb represents the base for a traffic process, giving that two essential traffic directions relevant for Rijeka, both road and railway, intersect in Zagreb (Kos, Brcic and Karmelic, 2010, p. 191):
1. From Ukraine and Slovakian Republic through Budapest and Varazdin: this is the branch Vb of the Pan-European Corridor V, connecting the Baltic countries, as well as

the countries of Central and Eastern Europe with the Adriatic and the Mediterranean (Budapest-Zagreb-Karlovac-Rijeka-Trieste),

2. From Austria, the Czech Republic and Germany through Graz and Maribor (Slovenia): the branch Xa of the Pan-European corridor X, connecting South-Western and Central Europe with central Adriatic (Graz-Maribor-Zagreb). The corridor Trieste-Ljubljana-Zagreb-Belgrade-Skopje-Athens/Sofia-Istanbul connects Western and North-Western Europe with the Middle East.

Table 1: Distance between Port of Rijeka and selected European metropolis (http://www.lukarijeka.hr/hr/port_handbook/polozaj/default.aspx)

CITY	ROAD DISTANCE (km)	RAIL DISTANCE (km)
Zagreb	145	228
Budapest	504	592
Bratislava	550	686
Wien	490	572
Prague	810	844
Belgrade	569	669
Sarajevo	456	490

Existing road network of Port of Rijeka is quite good, but its expansion is expected in the near future. That is specially related to the construction of the XI. Pan-European corridor Baltik-Jadran which should ensure the connection between Baltic and Adriatic by modern intermodal transportation system (Milos, 2010, p. 18).

Quality of rail network of Port of Rijeka is not at the appropriate level (bad conditions of railroads, lack of wagons). In addition to the existing inefficient railway Rijeka-Zagreb, there are no direct railway connections between Rijeka and Croatian railways in Istria and further with the ports of Koper and Trieste, as well as no direct railway connections with the port of Ploce (Dundovic, Vilke and Santic, 2010, p. 168). Railway Rijeka-Zagreb is of vital role importance for Port of Rijeka.

One more advantage of geotraffic position of Port of Rijeka is closeness to the Airport of Rijeka that is distant just 30,4 kilometers.

The strategic commitment of each port is to ensure the best possible connection with the hinterland, spreading the gravitational area and ensuring a larger amount of the cargo (Kos, Brcic and Karmelic, 2010, p. 200).

Further development of traffic routes to Rijeka is an important factor of involvment of Republic of Croatia in the European integrations. For better utilization of prosperous geotraffic position of Port of Rijeka it is necessary to modernize the railway Rijeka-Zagreb in the near future and also to build multipurpose Danube-Sava canal. Favorable geotraffic position is not sufficient to create a significant port hub. Key role in exploiting the advantages of geotraffic position have measures of traffic and economic policy. Advantage of position of Port of Rijeka is not just natural exit toward the sea, even more important is its closeness to the capitals of neighbour countries (Table 1).

3   ANALYSIS OF TRAFFIC IN THE PORT OF RIJEKA FROM 2006-2011

The majority of the freight transport refers to the Port of Rijeka and the port of Ploce that have become the main Croatian cargo ports, achieving almost 90% of total freight traffic (Hadzic, 2012, p. 126). Sufficient terminal depths (18 m) are ensuring acceptance of larger container vessels (Kos, Brcic and Karmelic, 2010, p. 190).

The transport of final products prevails for the market in Croatia, and specially it refers to the Port of Rijeka. Having observed traffic and possibility of its growth it is important to mention that 13 operators provide container service in the Port of Rijeka (Kos, Brcic and Karmelic, 2010, p. 197).

Table 2: Traffic in Port of Rijeka in 2009 and 2010 in million tons (Zelenika, R., Mrvcic, A. and Pavlic Skender, H., 2011 , p. 13; Baric, S., Devcic, I. and Valencic, M., 2008, p. 168; http://www.portauthority.hr/docs/portauthorityHR/documents/64/Original.pdf)

TYPE OF CARGO	2006	2007	2008	2009	2010	2011
General cargo	1.572	2.155	2.373	2.112	2.317	2.233
Bulk cargo	3.199	3.142	3.377	2.873	2.050	2.023
Wood	236,44	325,55	276,06	220,98	243,95	245,182
Total dry cargo	**5.010**	**5.624**	**6.027**	**5.207**	**4.559**	**4.502**
Total liquid cargo	**5.877**	**7.588**	**6.364**	**6.030**	**5.623**	**4.887**
Container traffic (TEU)	94.390	145,04	168,76	130,74	137,05	150,68
Total traffic (dry + liquid)	**10.887**	**13.212**	**12.391**	**11.238**	**10.183**	**9.390**

Significant decrease of bulk cargo traffic in 2010 is a result of lower traffic of grains that was caused by lower grain output as a consequence of bad weather conditions and often overflooding. The same trend is continued in 2011.

If it is observed container traffic it can be seen in the table 2 that its value in 2011 (150,68) is 59,63% higher than in 2006. After the crisis impact in 2009, container traffic has again raising trend. Such growth of container traffic is a result of high quality of services, feeder services, the new transshipment capacity and the introduction of direct services (Tomasevic, Jadrijevic and Dundovic, 2011, p. 474).

The major role in the further development of the Port of Rijeka has Rijeka Gateway project which aim is to expand the port capacities, specially that is refered to the container terminal. The aim is to invest in equipment at the Brajdica terminal, to achieve a full automation of unloading, storage and container shipping process and to increase the container capacity to 600 thousands of TEU (Peric Hadzic, 2012, p. 132).

A key disadvantage of Port of Rijeka are not particularly favorable topographical conditions to build a large port. Lack of flat terrain on the coast may be recovered by silting but it requires a significant investment of financial resources (Strazicic, 1993, p. 38).

It is important to mention that major concurrents of Port of Rijeka are coming from European Union and that 'Schengen Regime' had negative effect on the port of Rijeka. The entry of Croatia into the European Union will certainly result in the container traffic increase in the port of Rijeka, which is evident in the port of Koper, since it has been increasing each year, specially after the entry of Slovenia in the European Union. Due to that it can be expected that

container traffic will grow at the Port of Rijeka due to its friendly relations to Bosnia and Herzegovina, Hungary and Serbia. After the entry of Croatia in the European Union Port of Rijeka will finally have equal market conditions as well as the major concurrents and that is opening new business opportunities.

4   FINANCIAL ANALYSIS OF PORT OF RIJEKA

Financial analysis was conducted on base of two groups of indicators: safety indicators (liquidity and leverage) and activity ratios. The base for analysis of safety indicators and activity ratios for Port of Rijeka was annual report (balance sheet, income statement and cash flow statement) for 2011 year. In 2011 Port of Rijeka had achieved high net income as a result of sale of proprietary share to the strategic partner on Container terminal of Port of Rijeka.

4.1   Safety indicators

Liquidity ratios are used to determine a company's ability to pay off its short-term liabilities (Brealey et al., 2007, p. 460).

Table 3: Liquidity ratios of Port of Rijeka (authors calculation based on financial statements from 31.12.2011. taken from Zagreb stock exchange)

COEFFICIENT	VALUE
Current ratio	1,36
Quick ratio	1,33
Coefficient of current liquidity	0,0053
Working capital (bill HRK)	33,98
Long term liquidity ratio	0,9153

Note: HRK – currency of Croatia (kuna). 1 EUR ≈ 7.55 HRK

Current ratio shows a company's ability to pay short-term obligations from current assets (Zager et al., 2008, p. 248). As its value is 1,36 it can be concluded that Port of Rijeka is able to cover the liabilities just 1,36 times larger than the one that it has.

Quick ratio measures a company's ability to ensure certain amount of money in short period, and it is calculated from relation of current assets minus inventories divided by current liabilities. Its value (1,33) is acceptable and it indicates that Port of Rijeka is well managing its inventories.

Coefficient of current liquidity that is calculated from relation money equivalents and current liabilities is more required than the quick ratio. It value should be more than 1 as company could settle its current liabilities that run out on charge. The value in this case of 0,0053 represents that Port of Rijeka can cover just 0,53% of its current liabilities.

Working capital is specific ratio as it provides information in absolutely amount. As Port of Rijeka has positive value of working capital it is able to finance current business activities.

Long term liquidity ratio that is calculated as relation of long term assets to capital plus long term liabilities should be less then 1. In table 3 it can be seen that its value (0,91) is very close to critical value.

Leverage ratios relate to the structure of sources of assets and show how big amount of assets is financed from own sources and how much from external sources. Based on them it can be defined how much company is in charge and if there is possibility for new debt and shows whether the company is able to manage its current liabilities (Brealey et al., 2007, p. 459).

Table 4: Leverage ratios of Port of Rijeka (authors calculation based on financial statements from 31.12.2011. taken from Zagreb stock exchange)

COEFFICIENT	VALUE
Financial leverage	71,42%
Coefficient of funding	0,40
Debt ratio	0,29
Times interest earned	11,54
Indebtedness factor	1,41
Cover rate I	0,96
Cover rate II	1,09

One of major leverage ratios is financial leverage that puts in relation balance capital and total asset. It defines if it is worth to use external sources of funding until business activity realizes the rate of return higher then the weighted average interest rate at which it pays interest on loan capital (Orsag, 2003, p. 514). Leverage effect defines that the rise of another's funding increases profitability of investment is greater than the interest rate on the borrowed capital. Average value of financial leverage shows that Port of Rijeka can finance 89,80% of its assets by own capital and the rest from external sources.

Coefficient of funding puts in relation total liabilities and owner's capital, due to that, total liabilities of Port of Rijeka constitute 40% of its capital.

Time interest earned defines how many times company can cover interest expense from gross income. Observing value of time interest earned it can be seen big difference on individually level that observed company can settle 11,54 times its liabilities based on interest expense.

Indebtedness factor (total liabilities against net income plus amortization) reflects how many periods necessary to company to settle its liabilities. Due to data presented in table 4 it can be defined that Port of Rijeka needs 1,41 year to pay all liabilities if the level of income is equal to this from 31.12.2011.

Debt ratio reflects how many times total liabilities are bigger than total assets. It is desirable for company and especially for investors that its value is lower. As its value is 0,29 for observed company it can be concluded that Port of Rijeka does not have large debts.

Cover rate 1 shows rate between capital and long term assets, while cover rate 2 puts in relation capital enlarged for long term liabilities to long term assets. Value of cover rate 1 and cover rate 2 is acceptable if it is above of value of industrial average or that is higher in relation to other companies from same services. When its value is growing then company's liquidity is increasing while indebtedness is decreasing.

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4.2   Activity ratios

Each company tend to use its asset more effectively and financial analysts measure that through activity ratios. Based on them it can be concluded how many units of revenue are produced from each unit of total or part of asset. Those ratios are informing us about the rapidity of asset circulation during the business activities (Brealey et al., 2007, p. 462).

Crucial activity ratio is total asset turnover ratio that is calculated as a relation of total revenues and total asset. As its value is 0,52 it can be defined that Port of Rijeka through one year inverts its total asset 0,52 times through total revenues. Current asset turnover ratio reflects that Port of Rijeka through one year inverts its current assets 2,55 times through total revenues.

Table 5: Activity ratios Port of Rijeka (authors calculation based on financial statements from 31.12.2011 taken from Zagreb stock exchange)

COEFFICIENT	VALUE
Total asset turnover ratio	0,52
Current asset turnover ratio	2,55
Receivables turnover ratio	5,90
Inventory turnover ratio	24,48
Accounts receivable collection period	61,8

It is preferable that value of receivables turnover ratio is higher than value of concurrents. If company can charge its receivables it has enough money for launching new businesses, that final influence on increase of value of total asset turnover ratio and current asset turnover ratio. Its value for observed company is more than satisfactory.

Inventory turnover ratio represents how many times has company ordered inventories from its suppliers. If its value is much higher than the value of industry average it can be concluded that company has certain problems during the purchase of inventories. Opposite that, if the value of inventory turnover ratio is lower than the value of industry average it is possible to have problems in business transactios with the clients.

Value of accounts receivable collection period (61,8) shows that Port of Rijeka needs 61,8 days to charge its receivables.

5   CONCLUSION

The port of Rijeka is a port of national interest opened to national and international public traffic; it is conveniently oriented toward the world's seaborn routes.

Advantage of position of Port of Rijeka is not just natural exit toward the sea, even more important is its closeness to the capitals of neighbour countries. For better utilization of prosperous geotraffic position of Port of Rijeka it is necessary to modernize the railway Rijeka-Zagreb in the near future and also to build multipurpose Danube-Sava canal. Favorable geotraffic position is not sufficient to create a significant port hub.

Financial analysis was carried out through analysis of safety indicators and activity ratios. Values of all observed coefficients, except the value of long term liquidity ratio which is very close to the critical value and the value of coefficient of current liquidity that defines that Port

of Rijeka can cover just 0,53% of its current liabilities, are at the satisfactory level. But it is important to mention that Port of Rijeka achieved high net income in 2011 as a result of sale of proprietary share to the strategic partner on Container terminal of Port of Rijeka and that might influenced values of some observed coefficients.

Port of Rijeka has great potential to generate traffic with the shippers from the Far East who are interested that shipments to Eastern and Central Europe go without transshipment in the Mediterranean as it would result with lower transportation costs. When shipment is going across the Mediterranean then it is the longest maritime route which causes realization of lower transportation impact per unit of cargo, and that reflects in the final price of the product at the European market.

Port of Rijeka has great potentional for growth in the upcoming years due to possibilities of improvement of traffic connections and to fact that Republic of Croatia is entering in the European Union on July of 2013. After the entry of Republic of Croatia in the European Union, Port of Rijeka will finally have equal market conditions as well as the major concurrents and that is opening new business opportunities. Also, it is expected the container traffic increase as other neighbour ports have achieved increase in container traffic after the entrance in the European Union.

The comparative advantages Port of Rijeka related to the other North Adriatic ports are following:
- depth of terminals is going up to 18 meters, which enable acceptance of largest container ships (mother vessels),
- very good existing road connections to the rest of Europe (V. and X. Pan-European corridor) and in the near future it is expected connection to the XI. Pan-European corridor (Baltic-Adriatic) and
- distance from Rijeka airport is only 30.4 kilometers.

The main disadvantages of Port of Rijeka are related to its location in the main center of Rijeka and unsatisfactory road network (bad conditions of railroads, lack of wagons, no direct railway connections between Rijeka and Croatian railways in Istria and further with the ports of Koper and Trieste, as well as no direct railway connections with the port of Ploce).

The future of Port of Rijeka is to develop its role as a transit port for Central and Eastern Europe.

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TRADE-OFF THEORY VS. PECKING ORDER THEORY – EMPIRICAL EVIDENCE FROM THE BALTIC COUNTRIES[1]

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ABSTRACT
Capital structure is of particular importance in estimating the company value; an accurately estimated and selected equity and debt ratio can maximize the company value and minimizes the cost of capital; therefore, this issue is especially significant in the changing conditions of economic development. The main purpose of this study is to simultaneously evaluate the pecking order and trade-off theories of capital structure and determine which one performs better for a sample of companies from the Baltic states. Analysis is conducted on a sample of 75 listed companies (Baltic Stock Exchange) over the period from 1998 to 2011. The authors test theories using panel data and regression analysis. The empirical results show that listed companies in Latvia, compared to the other countries, can be characterized by the lowest debt ratio, however an increase in the average debt ratio can be observed, therefore the gap has been reduced in the recent years. The study did not find evidence supporting pecking order theory, but results show that companies adjust their debt levels according to target debt.

Keywords: *Capital structure, Debt ratio, Leverage, Pecking order theory, Trade-off theory*

1   INTRODUCTION

Capital structure is of particular importance in estimating the company value; an accurately estimated and selected equity and debt ratio can minimize the cost of capital and maximize the company value, and, consequently, the value for shareholders.

The starting point for the subject of capital structure is the irrelevance proposition of Modigliani and Miller (1958, 1963). Since then, enormous number of papers were published on optimal capital structure and capital structure theories. Although in recent decades many compliance tests have been carried out in various countries and various industries, there are still many unanswered questions and problems.

In capital structure literature, two capital structure theories prevail – the trade-off theory and the pecking oder theory. Pecking order theory states that companies prioritize their sources of financing – at first they prefer to use internal funds, then to borrow, and at last to issue equity as a last resort; consequently there is no clear target debt-equity mix (Myers and Majluf, 1984). Trade-off theory argues that company chooses debt and equity mix by balancing the benefits and costs of debt. If company increases its leverage, the tax benefits of debt increase, as well. At the same time, the costs of debt also rise (Kraus and Litzenberger, 1973). The

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pecking order theory expects a negative relationship and the trade-off theory expects a positive relationship between profitability and leverage.

The **aim of the research** is to simultaneously evaluate the pecking order and trade-off theories of capital structure and determine which one performs better for a sample of companies from the Baltic states.

The **tasks of the paper** are as follows:

- To overview the results of previous research made in this field;
- To evaluate the pecking order and trade-off theories on a sample of 75 listed companies;
- To determine which theory performs better for a sample of companies from the Baltic states.

The **research methods** used in the paper include the following qualitative and quantitative methods: the monographic method, descriptive statistics, regression analysis, graphical method. The research is based on published papers on the pecking order and trade-off theories, as well as information provided by the Baltic Stock Exchange (financial statements). Analysis is conducted on a sample of 75 listed companies (Baltic Stock Exchange) over the period from 1998 to 2011.

2   LITERATURE REVIEW

The pecking order theory states that companies prioritize their sources of financing – at first they prefer to use internal funds, then to borrow, and at last to issue equity as a last resort. The reason of such hierarchy is the information asymmetry, since managers know more about the company performance and future prospects than outsiders. Managers are unlikely to issue company shares when they believe that shares are undervalued, however they are more inclined to issue shares when they believe they are overvalued. Shareholders are aware of this and they may interpret a share issue as a signal that management thinks the shares are overvalued, and, in reponse, shareholders might increase the cost of equity. There is no clear target debt-equity mix. The pecking order theory does not deny that taxes and financial distress can be important factors, however they are less important than manager's preference for internal over external funds and for debt financing over new issues of common stock.

The trade-off theory states than an enterprise chooses debt and equity mix by balancing the benefits and costs of debt. If the enterprise increases its leverage, the tax benefits of debt increase, as well. At the same time, the costs of debt also rise. The original version of the trade-off theory grew out of the debate over the Modigliani-Miller theorem. Kraus and Litzenberger (1973) formally introduced the tax advantage of debt and bankruptcy penalties into a state preferance framework. The trade-off theory predicts that target debt ratios will vary from enterprise to enterprise. Companies with safe, tangible assets and plenty of taxable income ought to have high target ratios. Unprofitable companies with risky, intangible assets ought to rely primarily on equity financing.

According to Myers (1984), a company that follows the trade-off theory sets a target debt-to-value ratio and then gradually moves towards the target. The target is determined by balancing debt tax shields against costs of bankruptcy. Frank and Goyal (2005) break Myers' definition into two parts:

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- Definition 1 – the static trade-off theory – a company is said to follow the static trade-off theory if the leverage is determined by a single period trade-off between the tax benefits of debt and the costs of bankruptcy.
- Definition 2 – target adjustment behaviour – a company is said to exhibit target adjustment behaviour if the company has a target level of leverage and if deviations from that target are gradually removed over time.

Previous empirical research of evaluating the efficiency of both the pecking order and trade-off theories has provided mixed results.

Shyam-Sunder and Myers (1999) find that the pecking order is an excellent descriptor of corporate capital structure and the target adjustment model performs good as well. When both models are tested together, the pecking order results change hardly at all, however performance of target adjustment model decreases.

Frank and Goyal (2002) test the pecking order theory on publicly traded American enterprises from 1971 to 1998. According to the results, net equity issues track the financing deficit more closely than do net debt issues.While large enterprises show some aspects of pecking order behavior, the evidence is not robust.

Byoun and Rhim (2003) conclude that enterprises adjust their debt levels according to target debt ratios, as well as the pecking order.

De Medeiros and Daher (2005) tested the pecking order theory in Brazilian companies. It was concluded that in its weak form the theory is applicable to Brazilian companies, but not in the strong form.

The study done by Sanchez-Vidal and Martin-Ugedo (2005) used a panel data analysis of Spanish companies. The results show that the pecking order theory holds for most subsamples analyzed, particularly for the small and medium-sized companies and for the high-growth and highly leveraged companies.

Seppa (2008) investigated 260 Estonian non-financial enterprises, using financial statements of 2002/2003 or 2003/2004 and found the support for pecking order theory, however in the long run the evidence supporting this remains weak. The results provide no or very weak support that the trade-off theory is followed in the long-run.

Cotei and Farhat (2009) find that managers tend to adjust toward target leverage but this does not prevent them from deviating from this target to take advantage of the equity market conditions and the information asymmetry problem.

Mukherjee and Mahakud (2012) conclude that the trade-off theory and pecking order theories are not mutually exclusive. The companies do have certain target ratio and the costs and benefits of debt as well as asymmetric information costs play a significant role for the determination of optimal leverage ratio for Indian manufacturing companies.

Mazen (2012) used a French panel data to examine the validity of the static trade-off theory and the pecking order theory. This study can not formally reject either one of the two theories, however it confirms the importance of considerations provided by the static trade-off theory.

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Amaral et al. (2012) used a sample of non-financial Brazilian copmanies from 2000 to 2010. The study concluded that the companies follow the pecking order theory, however, no evidence was detected, which states the trade-off theory.

Though many research studies had been undertaken in the field of the pecking order and trade-off theories, the results are still unclear. Some studies support the pecking order theory or the trade-off theory, while other studies both of them or none at all.

3   SAMPLE DESCRIPTION

The data used is taken from the NASDAQ OMX Baltic (financial statements). The financial companies were excluded, because their characteristics are different due to the specific balance sheet structure. Data used are from the period of 1998–2011. Chart 1 shows the allocation of companies used in this study.
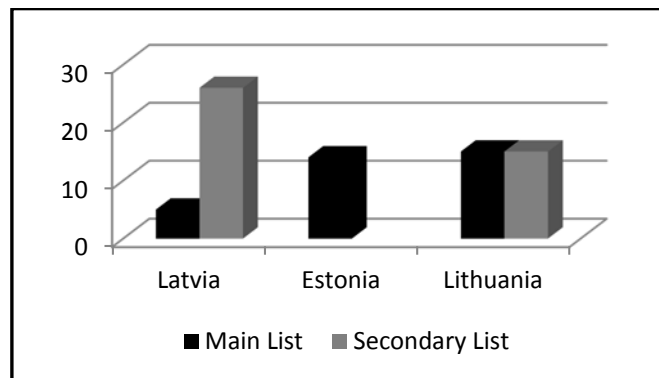
Chart 1: Baltic listed companies (NASDAQ OMX Baltic) on 18.11.2012

Companies represent different industries. Most represented industries are consumer goods (27 companies or 36%) and industrials (12 companies or 16%).

Table 1 provides descriptive statistics of the companies included in the study:
- Average debt ratio in Latvian listed companies increased from 10.8% in 1998 to 20.2% in 2011, however debt ratio of Estonian and Lithuanian companies fluctuated in a narrower range. Debt ratio of Estonian companies varied from 20.0% to 35.4% (average 28.8%) and debt ratio of Lithuanian companies changed even less - from 23.9% to 29.8% (average 26.6%);
- The median debt ratio also differs. In Latvia from 1998 to 2004 median debt ratio was mostly less than 10% (except 2003), however, it increased in the following years. Companies in Estonia show much higher median debt ratio; the smallest median debt ratio observed in 1999 (19.5%) and the highest in 2003 (46.0%). In Lithuania the median debt ratio fluctuated less so – from 20.9% (2002) to 30.7% (2008);
- Maximum debt ratio in two cases exceed 100% - this is due to negative equity (Latvia and Lithuania, 2010).

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Table 1: Descriptive statistics of the debt ratio for a sample of companies from Baltic countries, 1998–2011 (Data calculated by the authors of the paper, using NASDAQ OMX Baltic data)

Year	Latvia			Estonia			Lithuania		
	Average	Median	Max	Average	Median	Max	Average	Median	Max
1998	10.8	8.7	25.7	28.0	26.9	40.1	23.9**	23.9**	23.9**
1999	14.5	0.3	45.7	20.0	19.5	30.4	28.8**	28.8**	28.8**
2000	15.7	7.7	46.6	24.5	24.5	39.3	26.2**	26.2**	26.2**
2001	11.7	4.5	54.8	27.0	28.3	45.4	27.1**	27.1**	27.1**
2002	13.1	6.8	54.6	34.1	41.4	54.7	25.1	20.9	77.8
2003	13.5	11.7	33.6	35.4	46.0	59.9	24.9	25.1	70.5
2004	15.7	9.1	60.8	34.5	44.4	65.6	26.8	25.9	88.3
2005	15.5	14.6	60.4	32.1	32.7	55.4	27.9	24.8	80.2
2006	18.3	13.7	64.8	26.8	28.6	57.7	26.0	27.6	58.9
2007	23.0	14.2	75.1	24.5	19.3	55.8	25.6	23.5	57.2
2008	22.7	17.2	73.6	29.3	27.7	59.0	29.8	30.7	61.3
2009	23.3	20.3	78.5	31.3	32.6	60.7	28.9	25.8	69.2
2010	23.3	15.0	153.5*	28.2	27.3	57.1	26.8	21.7	138.3*
2011	20.2	17.2	61.9	27.5	26.8	53.3	24.4	23.5	68.1

Max debt ratio exceeds 100% due to negative equity.
**Only one Lithuanian company included in the sample (1998–2001).*

Chart 2 provides information on the average debt ratio for Baltic listed companies from 1998 to 2011. If one compares the three Baltic countries, then the average debt ratio was the smallest for Latvian listed companies for all period in question. The average debt ratio for Lithuanian and Estonian listed companies was similar, except for the period from 2002 to 2005, when the average debt ratio for companies in Estonia was considerably higher than for companies in Lithuania. It can be pointed out that, in Latvia, one can observe an increase in the average debt ratio – three years moving average increased from 13.7% to 22.3% (for example, the same average for companies in Estonia increased by five percentage points from 24.2% to 29.0%). At the end of the period in question, the average debt ratio in listed companies in Latvia is close to the average ratios in other Baltic countries.
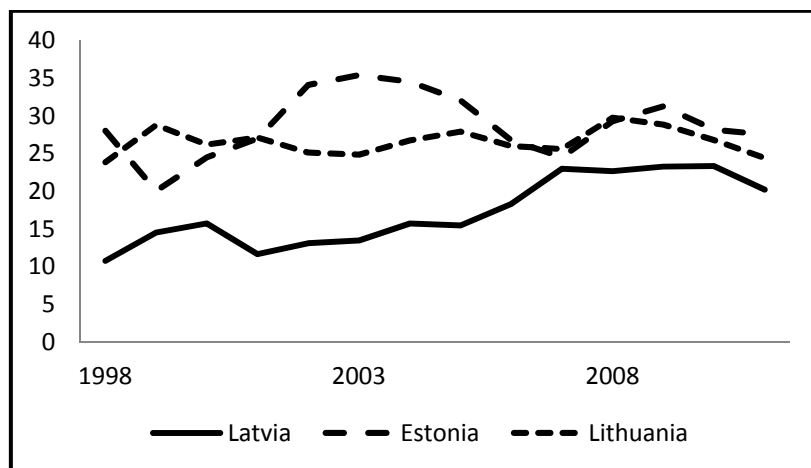
Chart 2: Baltic listed companies – debt ratio, 1998–2011 (Data calculated by the authors of the paper, using NASDAQ OMX Baltic data)

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In general, listed companies in Latvia can be characterized by the lowest debt ratio, however, an increase in the average debt ratio can be observed as well, therefore the gap has been reduced in the recent years. The average debt ratio for companies in Lithuania and Estonia was similar for the most number of periods and it fluctuated and increased less than in Latvian companies.

4   METHODOLOGY

In this study, in order to test the pecking order and the trade-off theory, the methodology by Shyam-Sunder and Myers (1999) is used.

For the pecking order theory Shyam-Sunder and Myers propose time-series hypothesis. The funds flow deficit is:

$$DEF_t = DIV_t + X_t + \Delta W_t + R_t - C_t, \qquad [1]$$

where
DIV_t – dividend payments,
X_t – capital expenditures,
ΔW_t – net increase in working capital,
R_t – current portion of long-term debt at start of period,
C_t – operating cash flows, after interest and taxes.
Then tested the following regression:

$$\Delta D_{it} = \beta_0 + \beta_1 DEF_{it} + e_{it,} \qquad [2]$$

where ΔD_{it} is the amount of debt issued (or retired if DEF is negative). The pecking order coefficient is β_1 and is expected to be 1. β_0 is the regression intercept and e_{it} is the error term. As pointed out by the authors, this does not include equity issues or repurchases, since the pecking order theory predicts that the enterprise will only issue or retire equity as a last resort. They admit that this equation cannot be generally correct, but it is a good description of financing.

For the trade-off theory they propose the following target adjustment model and regression specification:

$$\Delta D_{it} = \beta_0 + \beta_1 (D_{it}^* - D_{it-1}) + e_{it} \qquad [3]$$

D_{it}^* is the target debt level for enterprise i at time t. β_1 is target-adjustment coefficient. The hypothesis to be tested is $\beta_1 > 0$ (indicates adjustment towards the target) and also $\beta_1 < 1$ (implies positive adjustment costs). Target debt level is unobservable, the authors use three-year moving average. β_0 is the regression intercept and e_{it} is the error term.

This methodology has already been extensively used and modified. For example, the test of the pecking order theory is used by Amaral et al. (2012), Mazen (2012), Cotei and Farhat (2009), Byoun and Rhim (2003), Frank and Goyal (2002) and the test of the trade-off theory is used by Mazen (2012), Cotei and Farhat (2009), Byoun and Rhim (2003).

5   ANALYSIS OF RESULTS

Table 2 summarizes the results on the pecking order theory in the Baltic countries. Aim of the test was to state whether the companies follow pecking order theory.

Table 2: Results of the pecking order theory regression in the Baltic countries, 1999–2011
(Data calculated by the authors of the paper, using NASDAQ OMX Baltic data)

Year	Adjusted R Square	Regression Significance	Regression Coefficient	
			DEF	Sign.
1999	0.41*	0.04	1.03*	0.04
2000	0.84*	0.00	0.64*	0.00
2001	0.08	0.15	0.25	0.15
2002	0.99*	0.00	0.74*	0.00
2003	-0.01	0.45	0.02	0.45
2004	0.42*	0.00	-0.07*	0.00
2005	0.08*	0.01	-1.14	0.01
2006	0.88*	0.00	0.73*	0.00
2007	0.06*	0.02	0.08*	0.02
2008	0.51*	0.00	0.22*	0.00
2009	0.40*	0.00	0.12*	0.00
2010	0.21*	0.00	-0.06*	0.00
2011	-0.01	0.82	-0.02	0.82

*An asterisk indicates significance at the 5% confidence level.

In ten out of the thirteen periods analysed, regression is significant, however the adjusted R square varies from 0.06 to 0.99. Only in three periods the adjusted R square is more than 0.80 (2000, 2002, 2006) and the corresponding regression coefficient values are 0.64, 0.74 and 0.73 (significance 0.00). Therefore there is not enough evidence that the companies in the Baltic countries follow the pecking order theory.

In Table 3, the data are summarized for each country. In the case of Latvia, for eleven periods the regression is significant, however in seven periods the regression coefficient is negative or close to 0 (this coefficient should be 1 if the companies follow the pecking order theory). Similar situation is in Estonia – regression is significant in ten periods, in seven periods adjusted R square is more than 0.80, however the regression coefficient is not 1, but, just like in Latvia, in most cases close to 0 or negative. In Lithuania only data from 2003 are available for pecking order theory analysis. In five periods out of nine, regression is significant. Even though the regression coefficient is not 1, it is not negative (common occurence in Latvian and Estonian data).

Overall, even though there is no evidence that the Baltic countries support the pecking order theory, there is a conclusion of another kind - Lithuanian financing patterns differ from Latvia and Estonia, since Lithuanian DEF coefficient is only positive.

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Table 3: Results of the pecking order theory regression in Latvia, Estonia and Lithuania, 1999–2011 (Data calculated by the authors of the paper, using NASDAQ OMX Baltic data)

Year	Adjusted R Square	Regression Significance	Regression Coefficient	
			DEF	Sign.
Latvia				
1999	0.98*	0.01	-1.53*	0.01
2000	-0.17	0.64	-0.06	0.64
2001	-0.01	0.36	-0.40	0.36
2002	0.71*	0.00	-0.12*	0.00
2003	0.34*	0.00	-0.12*	0.00
2004	0.23*	0.00	0.12*	0.00
2005	0.11*	0.04	0.03*	0.04
2006	0.41*	0.00	0.31*	0.00
2007	0.92*	0.00	0.40*	0.00
2008	0.70*	0.00	0.19*	0.00
2009	0.62*	0.00	-0.03*	0.00
2010	0.93*	0.00	-0.11*	0.00
2011	0.59*	0.00	0.48*	0.00
Estonia				
1999	-0.05	0.45	-0.19	0.45
2000	0.73*	0.02	0.60*	0.02
2001	-0.25	0.98	0.01	0.98
2002	0.99*	0.00	0.75*	0.00
2003	0.36	0.07	-0.02	0.07
2004	0.76*	0.00	-0.08*	0.00
2005	0.88*	0.00	-9.8*	0.00
2006	0.99*	0.00	0.83*	0.00
2007	0.59*	0.00	-0.10*	0.00
2008	0.94*	0.00	0.19*	0.00
2009	0.88*	0.00	0.11*	0.00
2010	0.82*	0.00	-0.08*	0.00
2011	0.94*	0.00	-0.31*	0.00
Lithuania				
1999	Not enough data.			
2000				
2001				
2002				
2003	0.80*	0.00	0.77*	0.00
2004	-0.03	0.49	0.07	0.49
2005	0.21*	0.01	0.19*	0.01
2006	-0.04	0.81	-0.01	0.81
2007	0.69*	0.00	0.36*	0.00
2008	0.35*	0.00	0.40*	0.00
2009	0.37*	0.00	0.28*	0.00
2010	-0.04	0.79	0.01	0.79
2011	0.03	0.17	0.36	0.17

*An asterisk indicates significance at the 5% confidence level.

The results on the trade-off theory in the Baltic countries are shown in Table 4 below. The analysis is done for different periods of time: 1999–2010 (all periods included in the study) and this period divided into 1999–2007 and 2008–2010 due to the economic crisis – company financial data changed considerably due to the business cycle; and if one data set (1999–2010) were to be used, it could distort the results and conclusions.

The adjusted R square in the regression is good (0.66) and in accordance to F-Anova test all regressions are significant. In all cases the regression coefficient is between 0 and 1 (in accordance to the theory).

Table 4: Results of the trade-off theory regression in the Baltic countries, 1999–2010 (Data calculated by the authors of the paper, using NASDAQ OMX Baltic data)

Period		1999-2007	2008-2010	1999-2010
Adjusted R Square		0.66*	0.46*	0.62*
Regression Significance		0.00	0.00	0.00
Regression Coefficient	Coefficient	0.88*	0.56*	0.82*
	Significance	0.00	0.00	0.00

*An asterisk indicates significance at the 5% confidence level.

In table 5 summarizes the data for each country. In Latvia, regression for period of 2008-2010 is not significant (adjusted R square negative, significance level is higher than 0.05). For the whole period in question, the regression coefficient is 0.65. In Estonia regression results are significant for all three periods and the coefficient is 0.88. Overall, it can be concluded that all three Baltic countries show similiar financing behaviour in terms of target adjustment. All three regressions are significant and the regression coefficients are 0.65 (Latvia), 0.88 (Estonia) and 0.67 (Lithuania). Since these coefficients are positive and less than 1, it indicates adjustment towards the target and implies positive adjustment costs.

Table 5: Results of the trade-off theory regression in Latvia, Estonia and Lithuania, 1999–2010 (Data calculated by the authors of the paper, using NASDAQ OMX Baltic data)

Period		1999-2007	2008-2010	1999-2010
Latvia				
Adjusted R Square		0.67*	-0.003	0.34*
Regression Significance		0.00	0.36	0.00
Regression Coefficient	Coefficient	1.26*	0.03	0.65*
	Significance	0.00	0.36	0.00
Estonia				
Adjusted R Square		0.67*	0.62*	0.67*
Regression Significance		0.00	0.00	0.00
Regression Coefficient	Coefficient	0.88*	1.05*	0.88*
	Significance	0.00	0.00	0.00
Lithuania				
Adjusted R Square		0.62*	0.47*	0.52*
Regression Significance		0.00	0.00	0.00
Regression Coefficient	Coefficient	0.89*	0.57*	0.67*
	Significance	0.00	0.00	0.00

*An asterisk indicates significance at the 5% confidence level.

To sum up, while there is no evidence that the Baltic countries support the pecking order theory, all three Baltic countries show similar financing behaviour in terms of target adjustment.

The authors propose for companies from the Baltic countries to continue adjust their debt ratios and follow the trade-off theory, because:
- Debt is cheaper than equity, therefore, company reduces financial costs;

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- Tax shield – company deducts interest paid on debt from their tax liability and the company gains the so-called tax shield, which also increases company value;
- Theory implies a concrete optimal capital structure, however company can end up with a very high debt ratio if followed the pecking order theory, since equity issuance is as a last resort.

6   CONCLUSIONS

The research evaluates the pecking order and trade-off theories of capital structure and determines which one performs better for a sample of companies in the Baltic countries. Analysis is conducted using descriptive statistics and regression analysis. The study finds that:

- Though many research studies have been undertaken in the field of the pecking order and trade-off theories, the results are still unclear. Some studies support the pecking order theory or the trade-off theory, while other studies both of them or none at all.
- Listed companies in Latvia can be characterized by the lowest debt ratio, however, an increase in the average debt ratio can be observed as well, therefore the gap has been reduced in the recent years. The average debt ratio for companies in Lithuania and Estonia was similar for the most number of periods and it fluctuated and increased less than in Latvian companies.
- Even though there is no evidence that the Baltic countries support the pecking order theory, there is a conclusion of another kind - Lithuanian financing patterns differ from Latvia and Estonia, since Lithuanian DEF coefficient is only positive.
- All three Baltic countries show similiar financing behaviour in terms of target adjustment. All three regressions are significant and the regression coefficients are
- debt ratios and follow the trade-off theory.

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ANALYSIS OF CROSS-SECTOR DIFFERENTIATION DURING STRATEGY FORMULATION

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ABSTRACT
Strategy as an organizational projection advocates structuring around clearly defined objectives which create market efficiency. It achieves a balance between business and environment, for the purpose of general well being (shareholders, employees, customers and the community). National work classification classifies 21 activities, which can be sorted into four sectors (primary, secondary, tertiary and quaternary). Each of them has its own special characteristics which are becoming a key component of differentiation of the sector in comparison to others. Therefore it can be assumed that the strategy of companies within each sector is set in accordance with the specificities of sector, and that there are components that differentiate strategy of a certain sector against strategies of other sectors. Objective of this work is to find specific components for the development of strategies for each sector and key components of cross-sector differentiation when setting up strategies among different sectors. The focus will be directed to the analysis of the strategical guidelines inside the different sectors, and to the comparasion of the economic and strategical growth of a sector. The research was conducted by the telephone poll with the 80 companies located in the Republic of Croatia, 20 for each sector. The first goal of this paper is to establish the level of strategical guidelines development of this croatian companies, by verifying their success in fulfilling the norms of development and used strategies. The second goal is to establish the common elements of strategy between a certain company and other companies from the same sector, meaning to verify if the companies inside the same sector form their strategies in a similar manner. This will be used to determine the key points of the cross-sector differentiation, and to present the strategical specificals of each sector.

Keywords: Differentiation, Sectors, Strategy

1 INTRODUCTION

Business strategy is fundamental for an organization sucess in the highly-developed markets, therefore the development and execution of strategy represent the pivot of the business enterprise management and reflect the demands of the contemporary market values. Such market-oriented strategical planning becomes the managemental process of maintaining and augmenting the bond between the organisation's goals and the market possibilities, with the primary focus on the accumulation of profit, growth, and the achievement of the sustainable competatible advantage. Misdirected strategical decisions may jeopardize the organisation's existance. Growing competition forces a company to create a clearer business strategy which will differentiate it from the rest of the market. Many global companies, unlike domestic ones, have recognized the new marketing conditions and clearly defined the direction of their business operations.

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Strategical decisions are seldom uniform, due to their derivation from the appraisal of values which mainly depend of the people's oppinions, perceptions and suppositions, therefore eliminating the possibility of the unique approach to the strategical decision-making, applicable to every situation, organization or person. Theorists propose the strategical process model based on the analitical and rational approach to the questions (Stacey, 1997, p. 8) „How did we get here? Where we want to go? How to get there?". Definitions of strategy are numerous, but the one most quoted in the scientific circles is the Chandler's definition from the study Strategy and Structure which states: „Strategy represents setting of the company's fundamental long-term goals and tasks, declaration of the activities directions and the allocation of resources neccesary to achieve these goals." It is a successful, creative and innovative process that demands managing the opposites (Stacey, 1997, pp. 101–112) Strategy represents the reflection of the organization's growth and the allocation of the limited resources (Abell and Hammond, 1979, p. 14). Strategy is also considered to be an inspiration throughout which we seek to achieve the finite, usually long-term goal (Meler, 2005, p. 163). The goal is defined by planning decisions which represent interactions of company and its environment, but also by factors of economical and non-economical gains of the stock-holders, employees, buyers and community. Still, due to constant changes of the internal and external elements, it is neccesary to track those changes and accordingly modify existing strategy. For the strategical control to be effective, the key variables which effect the strategy efficiancy must be properly recognized inside and outside of a company (Ranko, Delić and Škrtić, 1999, p. 178). The control activities encompass the control of achieved results in comparison to the set goals. If the control shows stagnation or regress, it is necessary to form a new strategy which will incourage the company progress throughout changes in the current business and the employees enivorment and so yield the profit gain. This initiative is called SPRINT (Dolye and Bridgewater, 1988, p. 189).

Considering previously stated components, necessary for the achievment of the high-quality strategy that would warrant the business success, we can conclude that the different companies have different response to the external and internal factors which guide the company strategy in a certain direction. A question arise: do the external factors have such notable effect that the companies inside the same sector, for which can be supposed that they have the similar external influence, guide their strategies in a similar directions.

2 CROSS-SECTOR DIFFERENTIATION IN THE STRATEGY DETERMINATION

By analyzing the strategical guidelines of numerous companies, one can notice a certain differences in the company directing and determination of focus on the key segments related to their growth and development. Companies may be grouped into the segments, inside of which exists the similar strategy-setting differentiation, which draws the conclusion that the companies from the same sector have the same strategical guidelines, therefore being differentiated from the companies from the different sectors, in regard of key elements for the future development. Many common elements are noted, suggesting that the strategical guidance of a company has a significant effect on its further growth and developm.

Therefore it is neccesary to group the business activities inside the similar segments to point out their strategical specification. The national classification of business activities from 2007. divides the activities into 21 groups (NKD, 2007, 2008, p. 36), such as agriculture, forrestry and fishing, up to the activities of the foreign organizations and entities. To narrow down this segregation to the less elements, we could divide the mentioned activities into the four

sectors. Set into the primary, secondary, tertiary and quaternary sector, the activities are divided as agricultural, industrial and services. The primary sector activities are the one where a man finds the objects of his work in nature and by his work separates and adapts them for the further processing and consumption. The secondary economical sector comprises of the processing activities, so it often called the processing sector. The tertiary activities are services, which can be defined as untangible, immaterial, undividable activities, and currently employ most of the work force. The quaternary activities are specific services which as basic goal have the common welfare, not an individual personal gain. This division will be now shown graphically.
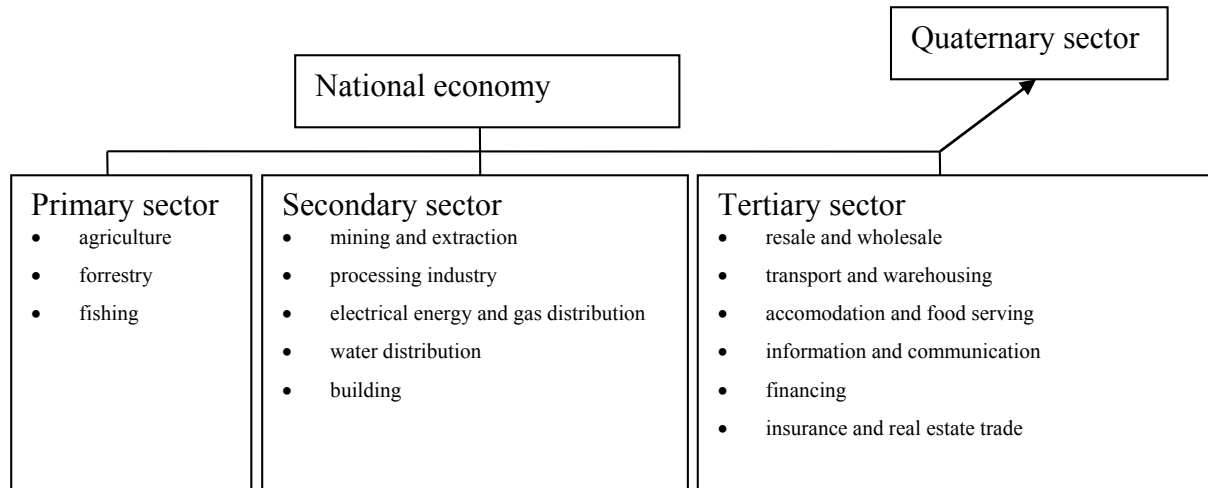
Chart 1: The structure of national economy (author)

Each of this sectors has its own specific aspects, which are the key components of the sectors differentiation. So it can be assumed that a individual company strategy inside a certain sector follows the specifical aspects of that sector. Based on the stated facts, we can draw a conclusion that there are the key components which are specific for the same-sector companies strategies, and at the same time differentiate the strategy in relation to the other sectors strategies.

2.1 Hypothesis

The goal of this paper is to find the specific components for the strategy development of each sector, and the key components of the cross-sector differentiations used in a setting of a cross-sector strategy. The focus will be directed to the analysis of the strategical guidelines inside the different sectors, and to the comparasion of the economic and strategical growth of a sector. The research was conducted by the telephone poll with the 80 companies located in the Republic of Croatia, 20 for each sector. The first goal of this paper is to establish the level of strategical guidelines development of this croatian companies, by verifing their success in fulfilling the norms of development and used strategies. The second goal is to establish the common elements of strategy between a certain company and other companies from the same sector, meaning to verify if the companies inside the same sector form their strategies in a similar manner. This will be used to determine the key points of the cross-sector differentiation, and to present the strategical specificals of each sector. Based on the previously presented data regarding the specific aspects of each sector, we can postulate the following two key hypothesis of this paper:

H 1. Each of this sectors has its own specifical aspects which are the key components of the sector differentiation in regard to other sectors. It can be assumed that the company strategy inside each sector is following the specific guidelines of its sector.

H 2. It can also be assumed that there are components which differentiate the strategy of a certain sector in relation to the strategies of other sectors.

Analysis tried to identify the companies strategies, and to determine their develompment and execution processes. The identification of the company strategy was conducted by analyzing the company's reactions to the market changes and other external influences. In addition to previous data, it was also analyzed which level of commitment is given to company's own development in search of new markets and entering new business activities. That was established by determining the level of attention given to research of internal and external environments and ability to express its own competitive advantages to achieve the recognisable and competitive strategy (Thompson, Strickland and Gamble, 2006). While analyzing the strategy guidelines, some of the questions also related to its execution.

The second part of the poll analyze the vision and mission which many authors consider to be the most important elements of the strategical management, the stepping stone of the strategical management which provides the cultural cohesion that enables a company to function as a single collective (Buble, 2005, p. 90). This ensures the business directioning and the goal setting. Therefore, it was analyzed whether are the vision and mission focused on key factors such as customers, employees, owners and the communities within which the company operates as well as markets, technology, concern for survival, growth and increased profits. For comparison of vision, mission and goals of the companies, the analysis of directional statements was used and the analysis was based on the previously marked components.

Since McCarthy pointed out the neccesity of accenting the 4P components (product, price, posting and promotion) as the elements inside the strategy which warrant the profitabilty (Kotler and Keller, 2008, p. 19), the sizable part of the poll is directed towards its analysis. Research probed the level of commitment a manager shows to the market, market segmentation and the product development, and the ability to handle data while making decisions. The significant part of the poll analyze benchmarking, which assures the safe way to forming a high-quality strategy, especially if executed with a special consideration to the Porter's „five forces" competitive advantages (Renko, Delić and Škrtić, 1999, p. 127). And analysis of the internal factors combined with the analysis of the external factors provides the creation of the information basis which will be foundation for the strategy development.

2.2   Methods of analysis

According to the previously stated data regarding the specific aspects of each sector, it is safe to assume that such specificality can be projected into the strategical guidelines of a certain company. Conclusion is that the quality of strategy development increases with each sector, which implies the significant difference of qualities of primary and quaternary sector in favour of quaternary sector.

Following the postulated assumptions regarding the cross-sectors differentiation in regards of the company strategy determination, next chapter will demonstrate the specifity of each sector, according to the analysis and comparasion of several companies selected by random choice. Out of each sector 20 companies have been selected. Their strategies are separately

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analyzed, thus providing the data about their specifical aspects, guidelines and the quality of production. This data was then used for inter-sector comparasion, which gave us a clearer image of the sector directioning. Final analysis compared the gathered data in regard to specificity of each sector, seeking to prove existance or non-existance of the cross-sectors differentiation in the strategy development, highlighting the key components which cause the sectors differentiation.

The research was conducted by telephone poll, where the top management executives from each company stated their own positions on the strategical guidelines and the strategy-forming modes. Method of research was the Likert scale, which measured and ranked the managers' response to statements. Level of concurrance for the certain statement served to demontrate the level of compliance to the certain issue, and to classify the strength of different sectors. The data collected through the survey questionnaire was analyzed using descriptive analysis and ANOVA test. In the text below the results of a complete analysis are presented. Designated indicators were adopted on the basis of the arithmetic mean of agreement, disagreement or lack of familiarity with specific component of company leadership.

3   RESULTS OF RESEARCH

Gathered data indicate that there is a differentiation in implementation of strategies among companies of different sectors. As assumed, the specifics of each sector are reported by emphasizing the focus on essential components of strategy. In all sectors a significant emphasis was placed on quality of product or service, but businesses of primary and quaternary sectors stress out that the price is not a factor that is pointed out through strategy because it is imposed by the market. Similar data was obtained by analyzing the distribution and promotions within same sectors because the leadership believes that the market is sufficiently regulated to function by itself and requires no further emphasis of these components. It is also clear that the primary sector companies do not pay great attention to development of strategies stressing 4P components as do the other sectors. The key to their strategy is a quality product that automatically creates demand. The following graph clearly shows that the strongest focus on the components of 4P is placed by companies of the secondary and tertiary sectors, with the lowest focus on price. Previously analyzed issue is further shown graphically in order to emphasize differentiation.
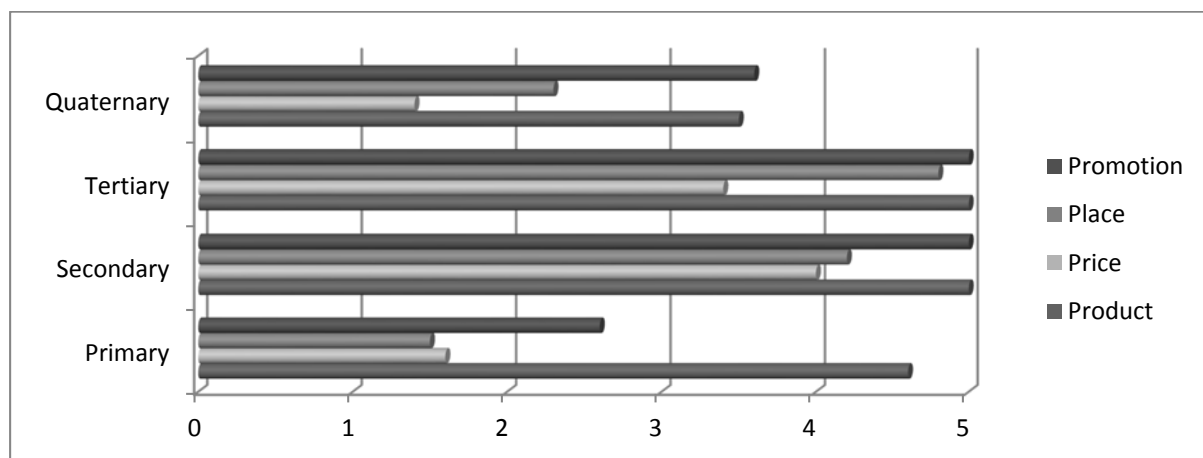
Chart 2: Cross-section differentiation when reflection on the components of 4P (author)

By analyzing the cross-sector differentiation, with strategic focus on product, by ANOVA test it is confirmed that a statistically significant difference exists between the arithmetic means of the samples (p-value is $3{,}4 \cdot 10^{-6}$), ie strategy of placing focus on the product is significantly different between sectors. Separately, by comparing quaternary sector with other sectors it can be concluded that there is a statistically significant difference between the arithmetic means of quaternary sector and other sectors in the attitude towards the importance of the product as a component of the 4P (with recieved p of 0,000335 and 0,05 in contrast to secondary and tertiary sectors). It can therefore be concluded that companies of quaternary sector do not show a strong need to emphasize product as companies of secondary and tertiary sectors do because of the specificity of the product or because of the products integration on the market.

Differential analysis on the formation of prices by using ANOVA test shows significant differentiation between sectors (p-value of $5{,}23 \cdot 10^{-12}$). However a separate analysis of sectors revealed no significant differentiation between primary and quaternary sectors (p = 0.5671) and the secondary and tertiary sectors (p = 0.102284), from which it can be concluded that the above sectors create price strategy in a similar way, ie the companies of secondary and tertiary sectors strongly emphasize price as a key strategic element. These assertions can be further substantiated by descriptive analysis shown below.

Table 1: Descriptive analysis of strategic focus on product and price (author)

Groups	*Product*				*Price*			
	Count	*Sum*	*Average*	*Variance*	*Count*	*Sum*	*Average*	*Variance*
Primary	20	92	4,6	0,673684	20	32	1,6	0,884211
Secondary	20	100	5	0	20	80	4	1,052632
Tertiary	20	100	5	0	20	68	3,4	1,515789
Quaternary	20	70	3,5	2,894737	20	28	1,4	1,515789

By analyzing strategic orientation on distribution, by using ANOVA test, results show a statistically significant differentiation between the analysis in each sector, and the overall cross-sector analysis (p= $1{,}37 \cdot 10^{-16}$). However, the most interesting is the analysis of focus on the promotion where a significant difference has been noted between the arithmetical means of samples (p= $1{,}93 \cdot 10^{-10}$), which indicates that there is a strong cross-sector differentiation in focus on promotion, although it was noted that between the primary and quartiary sectors there is no significant differentiation (p=0,05103). Thus we can conclude that the primary and quaternary sectors do not pay great attention to the promotion of the product, while secondary and tertiary sectors believe that the promotion is one of key components of their strategy. The above statement is shown in the following table.

Table 2: Descriptive analysis of strategic focus on distribution *and promotion (author)*

Groups	*Distribtion*				*Promotion*			
	Count	*Sum*	*Average*	*Variance*	*Count*	*Sum*	*Average*	*Variance*
Primary	20	30	1,5	0,789474	20	52	2,6	2,357895
Secondary	20	84	4,2	1,010526	20	100	5	0
Tertiary	20	96	4,8	0,378947	20	100	5	0
Quaternary	20	46	2,3	2,221053	20	72	3,6	2,568421

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After analysis of key components of the strategy, managers received the question whether they are using benchmarking. Following data has been collected.
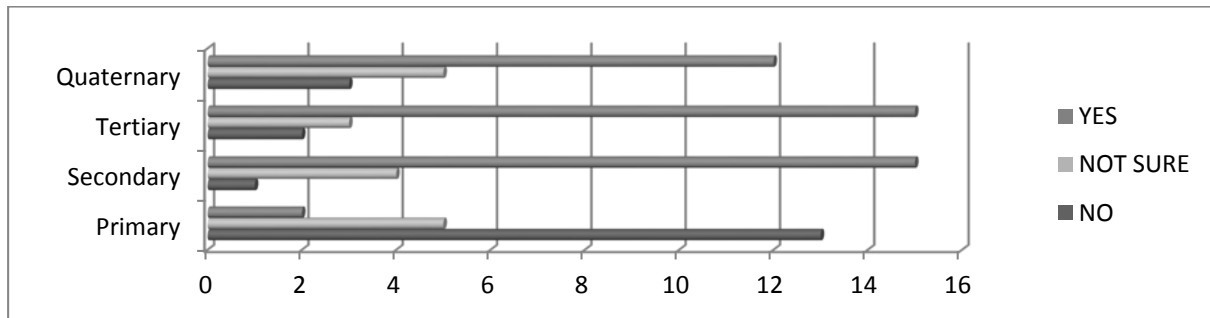
Chart 3: The data collected on the use of benchmarking (author)

And by using descriptive analysis the following indicators were obtained.

Table 3: Analysis of the implementation of benchmarking through different sectors (author)

Groups	Count	Sum	Average	Variance
Primary	20	38	1,9	1,884211
Secondary	20	88	4,4	1,305263
Tertiary	20	86	4,3	1,8
Quaternary	20	78	3,9	2,305263

From previously mentioned it can be observed that companies in all sectors except for the primary use benchmarking, which has indicated the differentiation between sectors through ANOVA test (p= $9,12 \cdot 10^{-8}$), separate analysis between sectors determined that the primary sector has influenced the reported differentiation ($p = 2,5 \cdot 10^{-7}$), while among other sectors there is no statistically significant differentiation (eg. $p = 0,801$ between secondary and tertiary sectors, $p = 0,25$ between secondary and quaternary sectors, $p = 0,38$ between the tertiary and quaternary.).

In the analysis of key threats or five key forces according to Porter, managers in all sectors have expressed the view that the impact of existing competitors in the market is the strongest external force that has impact on the company, even though their impact is significantly lower on companies in primary and quaternary sectors than on companies in secondary and tertiary sectors. The reason for this is the specific markets and job descriptions in which competition does not have such a significant stake on the success of company operations. It is important to emphasize that managers of the primary and quaternary sectors point out that there is no concern about customers and substitution products for exactly the same reasons as stated above. However companies of the quaternary sector show a strong influence of the suppliers on its business, much stronger than companies of other sectors, particularly the primary sector.

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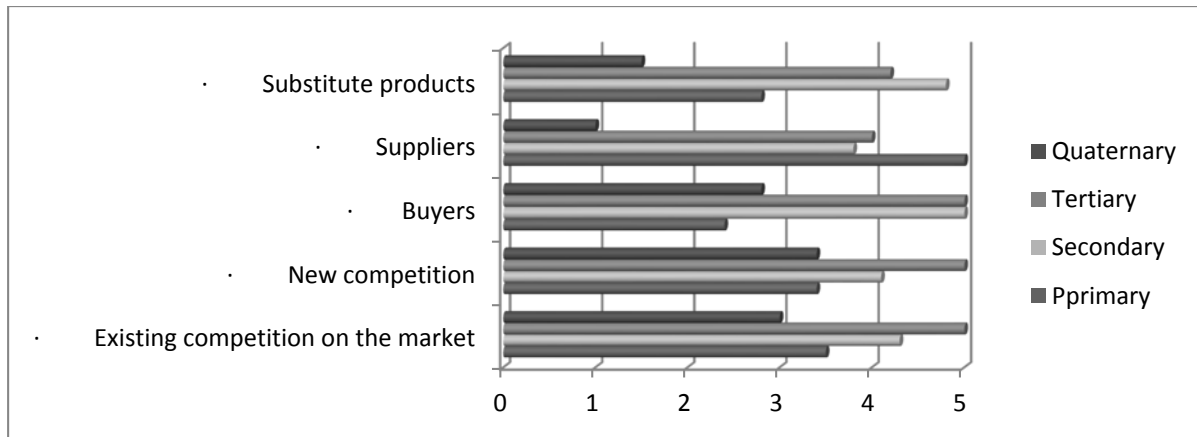
Chart 4: Key threats of companies are (author)

From chart shown above it is clearly evident that the impact of external forces is different on company's business between sectors, and it has strong implications for the creation of the company's strategy in the sector. The existence of a strong differentiation has also been proven with ANOVA analysis which at analysis of threats on the market ($p = 1{,}63 \cdot 10^{-5}$), analysis of the threat of new competitors ($p = 0{,}000528$), customers threats ($p = 6{,}15 \cdot 10^{-14}$), suppliers threats ($p = 2{,}63 \cdot 10^{-19}$) and threats from substitute products ($p = 2{,}12 \cdot 10^{-13}$) indicates a statistically significant difference between sectors.

Interesting results were obtained from a part of a survey that analyzed which are key components that are part of and were used in creation of the vision and mission. Managers were offered options to choose from and it is concluded that most managers believe that employees, concern for the survival, growth of the market and products are key components of strategic goals, vision and mission. It was also found that managers of primary sector consider that philosophy and self-concept are not an important component of the vision and mission, and a large percentage of them in the vision and mission statement do not include nor users nor concern for public opinion, which could be explained by the fact that companies in this sector produce intermediate products for the market which seeks them thus reducing the need for a strong attracting of buyers from the market. Regarding the quaternary sector it can be noticed that they place a strong focus on all the components except the technology that is not considered an important strategic factor. It is important to note that companies of secondary and tertiary sectors emphasize that all of these components are very important for the development of their strategy, and it can be said that there is no significant differentiation in this segment among them.

The analysis results are listed in the following graph.

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Chart 5: Key components of the vision and mission (author)

As a final component it is necessary to emphasize that the primary sector managers have suggested that strategic guidelines to subordinates are not transferred at all levels, which is a large obstacle for implementation of a strategy and a potential reason for the delay of the entire sector.

The last question asked the managers whether they think that their strategy is distinctive and competitive on the market. Gathered data is shown in the following table.

Table 4: Analysis of strategy competitiviti (author)

Groups	Count	Sum	Average	Variance
Primary	20	30	1,5	0,789474
Secondary	20	86	4,3	1,8
Tertiary	20	74	3,7	2,642105
Quaternary	20	80	4	2,315789

From the above data it can be viewed that the managers of primary sector companies are aware of the fact that their strategy is not competitive on the market and for this they are very different from the managers of companies from other sectors (in comparison with the secondary sector $p = 2,21 \cdot 10^{-9}$, with tertiary sector $p = 5 \cdot 10^{-6}$ and quaternary sector $p = 1,92 \cdot 10^{-7}$ which shows a clear differentiation). Thus it can be assumed that the under-developed strategy is a key reason for the stagnation of development of primary sector in comparison other sectors.

4 CONCLUSION

Each sector has its own specificities, both in business and in formulation of strategies. Analysis of sectoral specifications has shown numerous specifics. Although managers within all sectors are aware of the fact that only the product, its quality, price and access to buyers can point out the competitive advantage on the market, each of them puts the focus on the specific components that are of bigger importance to them.

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In the turbulent times in which companies are currently positioning on the market a stronger focus is placed on the market, growth of the company and its survival. Main reason is the size, number and strength of competitors on the global market, to which the company is trying to counteract. Therefore, when setting up strategy employees must be a key factor in development of the company, and by stimulating them a significant progress can be achieved.

By stressing the fundamental values, beliefs, aspirations and ethical priorities of company, it becomes more important in the perception of key stakeholders, and thus it can achieve greater incentive in all its target groups for further work and effort with purpose of progress and development of company. By analyzing companies through various sectors, one can observe the existence of certain rules when setting up a strategy, but in parallel with this there is a huge difference in orientation of strategy among companies within different sectors. That form of orientation can be strictly linked to the sector within which the company is located. Thus we conclude that the strategy can be precisely directed, and that it is possible to set a narrower range of segments that a high-quality strategy should have, in relation to a particular sector, thus helping companies within a sector with a better strategic guiding.

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INCOME DISTRIBUTION AND THE MEDIUM-TERM TREND OF INEQUALITY IN THAILAND

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ABSTRACT
Income distribution in Thailand has become the central issue due to the unequal distribution between modern and agricultural sector especially in the poorest Northeast which has the greatest number of agricultural household among regions. The hypothesis on inequality which has been discussed widely is the Kuznets inverted U- curve hypothesis that income inequality increases in the early stage of economic development and decreases in the later stage. The inequality trend in the medium-term showed the downward trend after the peak of inequality in 1992. This could implya development of Thai economy. However, income distribution and regional inequality are stillproblematic. Furthermore,although agricultural sector has an important role for Thai economy, the agricultural wage is still low, 2.61 and 1.69 times lower than the service and production sectors respectively.This research mainly focuses on the resultsof field survey in Mahasarakham and Kalasin provinces in the Northeast of Thailand. It is important toknow theopinionsof the people in the most unequal region.As field survey, people still would like to be supported from the government in terms of income more than other aspects but it is difficult to distribute enough support thoroughly. On the contrary, many people are satisfied with their living and not affected by the limitation of income. Moreover, gathering the group to support members could help to improve their living and without waiting only government's support.

Keywords:Income distribution, Income Inequality, Thai Economic and Social Development

1 INTRODUCTION

Income distribution has become the central issue in Thailand.The unequal distribution between modern and agricultural sector still occurs.The governmenthave tried to increasethe wage accompany with the continuous operation of the income security project to small farmers whom income is low. However, the povery in the Northeast where cantains the greatest number of agricultural household is still higher than in other regions. Although agricultural sector has an important role for Thai economy, the agricultural wage is about 2.61 and 1.69 times lower than the service and production sectors respectively. Furthermore, Agriculture is the second lowest of average income per labour amongs all production sector (Chansarn, 2009).

There was an official reportof the National Statistical Office (NSO) that conducted an opinion survey on what people need from the government by regions in 2010 (Table 1).

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Table 1: Opinion survey on what people needfrom the government by regions in 2010
(National Statistical Office (NSO) , 2010)

Region	Issue that should be prioritized	%
Bangkok	1. Poverty problem	39.4
	2. People's Debt problem	35.6
	3. Price of consumer goods	35.3
Central	1. Price of consumer goods	37.1
	2. Poverty problem	37
	3. People's Debt problem	35.2
North	1. Price guarantee for agricultural produce	41.9
	2. People's Debt problem	34.3
	3. Oil price control	32.8
Northeast	1. People's Debt problem	46.7
	2. Price guarantee for agricultural produce	40.6
	3. Poverty problem	32.4
South	1. Price guarantee for agricultural produce	34.6
	2. Price of consumer goods	33.6
	3. People's Debt problem	28.3

Another important point is the satisfaction of people on their living. This research is analyzed in order to know that people in the Northeast which have faced high inequality problem is satisfied their living or not as well as to understand their way of thinking.

2   INCOME DISTRIBUTION IN THAILAND

2.1   Overview of Income Distribution in Thailand
During the past 2 decades, income distribution inThailand had some small improved. Gini coefficient which is an inequality index were about 0.49 to 0.54 in 1998 to 2009. Inequality in 2009 is 0.493. It reflects that most of benefit of economic growth and development fall among some small group especially the rich group. The 10 percent richest group shared 38.41percent while the 10 percent poorest group shared only 1.69 percent of total income (NESDB, 2011).

As estimated regional income inequality, Northeast is the region which highest income inequality for many years. Although, the inequality of the whole country was improved, inequality of the Northeast is still higher than those of other regions.

2.2   The Medium Term Trend of Inequality in Thailand
The hypothesis on inequality trend which has been referred and discussed widely is The Kuznets hypothesis of Simon Kuznets since the 1950s that income inequality increases in the early stage of economic development and decreases in the later stage. This could occur when people in the agricultural sector which relatively low per capita of income shift to industrial sector which has higher per capita of income. The income gap between two sectors and the higher income is incentive for labour to move to the industrial one. Consequently, the expansion of industrial size with more unequal of income distribution occurs in the first period of development. However, in the later stage when the industrialization is adjusted, income inequality decrease, and narrow the income gap. This idea can be illustrated as Kuznets inverted U- curve which the inequality index such as Gini coefficient on y axis and

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economic development, time or per capita income on x axis. The explanation of Kuznets hypothesis can be applied not only for the case of industrialization but also for other cases when the new industry emerges such as the emergence of technological innovation or IT economy as in the developed countries. The Kuznets hypothesis has been cited and discussed in many researches on income inequality and development.

In the case of Thailand, the question that whether Thailand has already passed the turning point of the Kuznet inverted U-Curve has been discussed until the present time. There is important research of Ikemoto and Uehara (2000) that analysed income inequality and Kuznets hypothesis in Thailand include the period of the rapid economic growth of Thailand that started in the latter half of the 1980s when income inequality increased very rapidly and while the industrial sector absorbed underemployed labour force in rural areas in the early 1990s. The results of this research shows that the inequality do not show clear and consistent downward trends in the mid-1990s. However, the Kuznets' curve does not necessarily appear only once but can appear several times when new high-productivity industries appear as an N-Shape.

The medium term trend of inequality in Thailand was analysed by authors as well as consider the Kuznets curve hypothesis. We also predicted the turning point by regression. The result showed that Thailand reached the turning point in the 1990s.

Moreover, as a result of Gini coefficient estimation for the medium term trend of inequality, Thailand reached the peak of inequality in 1992 with the Gini coefficient at 0.543. This also match with the period of our prediction.

It can be seen from the figure 1 below that illustrated from the Gini coefficient from 1989 to 2009 with the Peak year and Bottom year of the Gini index. From this figure, it shows the downward trend of inequality after the peak inequality of 1992 although there was some fluctuation like N-shape but the peaktrend was diminish. This could imply the development of Thai economy. However, the income distribution and regional inequality are still problem.
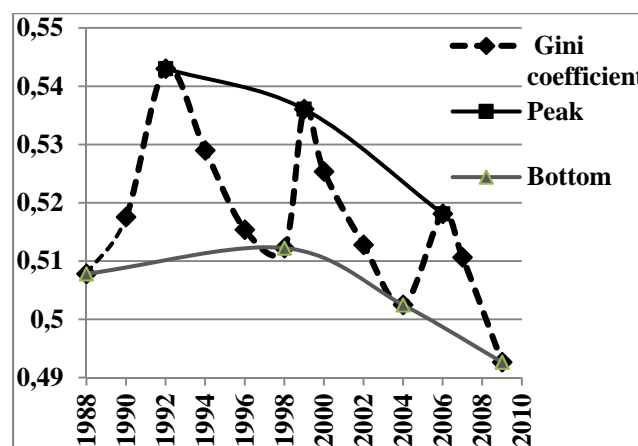
Chart1: Trend of inequality, 1998-2009 (Authors' Estimate)

3   FIELD SURVEY ANALYSIS

This part is based on field survey in Mahasarakham and Kalasin Provinces in the Northeast of Thailandin order to understand the real situation in the actual area as well as satisfaction of

people despite the high inequality. The survey was conducted by interviewing 43 intervieweeswhich consist of farmer about 55 percent, and people in other occupations which some of them do agriculture as well.

The questions can be categorized into 3 main focuses.
1. Opinion on income, occupation and income gap between Bangkok and Northeast
2. Satisfaction of current living
3. Opinion on support of the government

3.1 Opinion on income, occupation and income gap between Bangkok and Northeast

The objective of this part is to knowwhat people think about their income, occupation and the difference of income between Northeast and Bangkok, there are only 18.6 percent think their income is higher than other people in their province, and 81.4 percent think it is not. For the question "Does your occupation provide you with higher income than other occupations in the same province?", 16.3 percent answered "yes" and 83.7 percent answered "no". The group that answered "yes" consists of both farmer and non-farmer. However, most of respondents agree that agriculturists generally earn less income than other occupations.For the question, "Is average income of your province higher than other province in the Northeast?", 16.3 percent answered "yes" and 83.7 percent answered "no". In their point of view that whether the income gap between Northeast and Bangkok is increasing or not, 83.7 percent think the income gap between Northeast and Bangkok is increasing, and 16.3 think it is not increasing. (Chart 2).
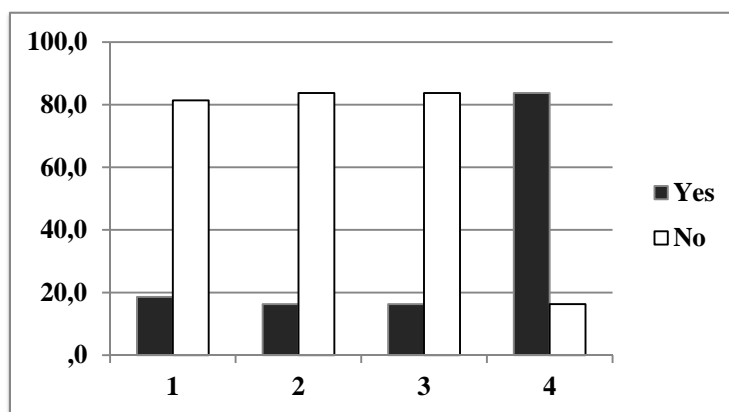
Chart 2: Opinion on income, occupation and income gap between Bangkok and Northeast (Field survey, 2012)

Note:
1. Do you think your income is higher than other people in your province?
2. Does your occupation provide you with higher income than otheroccupations in the same province?
3. Is average income of your province higher than other provincein the Northeast?
4. Do you think the income gap between Northeast and Bangkokis increasing?

3.2 Satisfaction of current living

This section was asked in order to know that how people feel about their overall living, satisfied or unsatisfied among the high inequality situation.The questionwas whether they are sastisfied their current living or not. The answer of interviewees was inverse to the high

inequality problem. There are up to79% of interviewees answered that they are satisfied, and 20.9% are unsatisfied (Chart 3).Both answers are fromthe respondents who are farmers and non-farmers.
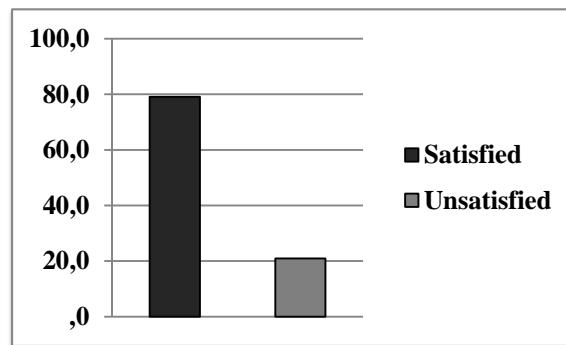
Chart 3: Sastisfaction of current living (Field survey, 2012)

For theinterviewees who answered "satisfied", there are 52.9 percent whose household have income more than expense (shown in the Table 2). The interesting point is the interviewees who answered "satisfied"also consist of people whose household have income less than expense 47.1 percent. It is because most of them feel that their current living is better than in the past. Therefore, they feel satisfied.There are 94.1 and 97.1 percent of "satisfied" group think that their current living is better comparing to 10 and 5 years ago.

In the group of people who answer "unsatisfied" , in term of income condition, 77.8 percent of people who are unsatisfied their current living have income less than expense. However, 44.4 percent of unsatisfied group thinktheir current living is better than in 10 and 5 years ago, and believe that their future will be better.

Table 2:Satisfaction of current living of interviewees by conditions (Field survey, 2012)

		Satisfied (100)	Unsatisfied (100)
Income	>Expense	52.9	22.2
	<Expense	47.1	77.8
Current living compare to 10 years ago	better	94.1	44.4
	same	-	33.3
	worse	5.9	22.2
Current living compare to 5 years ago	better	97.1	44.4
	same	-	33.3
	worse	2.9	22.2
Think that their future will be	better	97.1	44.4
	same	-	44.4
	worse	2.9	-
	Not sure	-	11.1

3.3   Support of the government

In every period, each government attempted to create many policies to provide high benefit to low income people. However, it is difficult to distribute enough support to allpeople

thoroughly, and sometimes the benefit could not reach to low income people due to many reasons such as misapplication of policies.

The policies which were launchedto elevate people's well-being not only in term of income but also quality of life. The policy which used and mentioned widely is the Universal Coverage Scheme or 30 baht for all health care which provide the access to necessary health services for only 30 baht(1 US$). This publicservice could reduce health expenditure and improve quality of life for low income people. However, as field survey, some inconvenience could occur because of the equity and quality of service. There are also policies focused to support the farmer group such as dept moratorium to farmers for 3 years and price guarantee for agricultural produces.

3.3.1   Enough support or not to improve the living

As survey, when asked that "Do you think you have received enoughsupports from the government, and those government policies are efficient enough to improve your living?''There are 27.9 percent of respondents think those are enough while 72.1 percent think those are not enough(Chart 4).
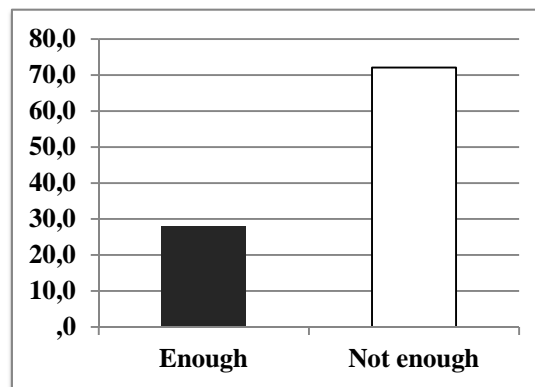
Chart4: Supports of the government and its efficiency(Field survey, 2012)

3.3.2   Issue of Political conflict

The issue of political conflict can affectthe economic and social development as well as impact on people's income and income distribution throughthe policy instability.In this part, we would like to know that whether they think the political conflict affected their work and life or not. The result is shown in the Chart 5. There are 51.2 percent answered "yes", they think the conflict lead to the change to new government, discontinued policies and affect to the economy that make their living more difficult, and higher cost of living. There are 48.8 percent answered "No" because they do not pay much attention on the conflict but rely on self sufficiency.

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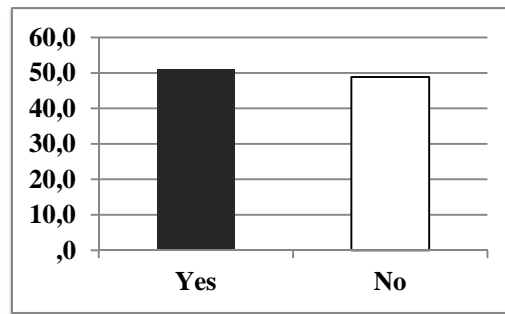
Chart5: Political conflict affected the work and life in interviewees' opinion (Field survey, 2012)

3.3.3 Policies which people need from the government

The Chart 6 shows the policies which interviewees think the government should launch to assist people. The policies which interviewees need the government to operate for peopleare as follows:

> 1. Income, expense, and debt problem2.Agricultural related policies3.Electricity and water supply 4.Market for product distribution 5. Support the local group and knowledge exchange for self-sufficiency 6.Funds 7.Quality of life support such as health service and education 8.Job creating and job training 9.Same standard welfare to all peopleand 10 represents the opinion from people whonot expect the government support.

The policy which most requested is policy tosupport higher income level, reduce the cost of living and solve debt problem, 26.09 percentof all requested policiies. The second one is the agricultural related policies,21.74 percent which the policy for agricultural produce's price guarantee was included.These results are consistent with the surveyon what people need from the government in the Northeast of the National Statistical Office in the Table 1.

Besides, not only support of the government, people in the local community have created the group to support member and exchange their knowledge for better living.
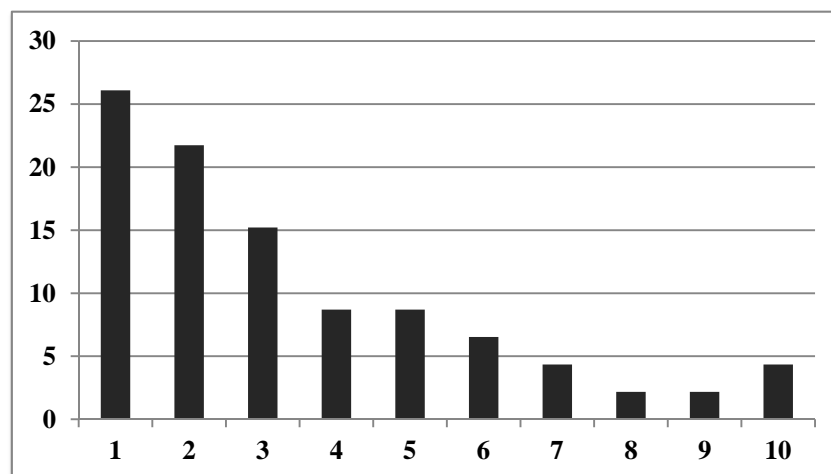
Chart 6: Policies which people need from the government in interviewees' opinion (Field survey, 2012)

Note: 1. Income, expense, and debt problem2.Agricultural related policies3.Electricity and water supply 4.Market for product distribution 5. Support the local group and knowledge exchange for self-sufficiency 6.Funds 7.Quality of life support such as health service and education 8.Job creating and job training 9.Same standard welfare to all people and 10 represents the opinion that not expect from the government support

4   CONCLUSION

Income distribution is one of the most important problem on economic and social development which difficult to eliminate within the short period. Although Thailand has already passed the turning point of the Kuznet's curve and the medium term trend of inequality showed some downward trend, the income distribution and regional inequality are still problem. It is important to receive the information from the people in the most unequal region in order to know their opinion in many aspects including satisfaction of living.

When asked interviewees to evaluate their income status, about 81.4 percent think they have lower income than other people even in the same province. There are 83.7 percent think their occupation does not provide them higher income than other occupations. Some people in non-farmer group also included in this answer. Furthermore, 83.7 percent of respondents also think the income gap between Bangkok and Northeast is increasing.

The interesting result is the answer of satisfaction of people on their living. The answer of intervieweeswas inverse to the high inequality problem. There are up to 79 percent of interviewees answered that they are satisfied, and only 20.9 percent are unsatisfied. Both answers are from the respondents who are farmers and non-farmers. It is because most of them feel that their current living is better than in the past.These could be imply that income level is not always the good indicator of life satisfaction.

The policy which most requested is policy tosupport higher income level, reduce the cost of living and solve debt problem, 26.09 percentof all requested policiies. The second one is the agricultural related policies which is21.74 percent.

Although, people still would like to be supported in term of income, percentage of interviewees who are satisfied their living is quite high. Futhermore, Gathering the group to support members could help to improve their livingand without waiting only government's support.

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Challenges of the Modern World - Contemporary Economy and Globalization

UNIVERSITY EDUCATION TOWARDS MARKET REGULATION - AN ATTEMPT TO RE-THINK ABOUT THE BENEFITS AND PROBLEMS ARISING FROM THAT

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ABSTRACT

The problem scratched in this text relates to the adaptation the university to marketed social reality. There is no doubt that this issue requires a wider reflection and discussion - not only academic. It is not only the impact of market-based solutions to the university, but also the problem of the majestic ethos of the institution, recruitment, social competence expected by employers in the face of the "final product" – university graduates. It is also important to distinguish within higher education in quality of education (university and higher vocational education). Not without significance are, still present in the background of discussions, considerations of institutional autonomy and freedom in the internal structure. In this article, two theses are presented in accordance with enclosed arguments. The first - the idea of the university in its assumptions presents a vision of the university, which is not possible to implement in the real world. The second argument points out that the problem of marketisation of the university is a multidimensional issue that cannot be assessed solely on the basis of negative consequences. Considerations are meta-theoretical and empirical creating in interdisciplinary perspective covering the philosophical, sociological and economic point of view.

Keywords: Administrative autonomy and education, Market regulations, The economy and the labor market, The university

1 INTRODUCTION

Immanuel Kant's in his work *Idea for a Universal History from a Cosmopolitan Point of View* stated that "all natural capacities of a creature are destined to evolve completely to their natural end" (Kant, 2005, p. 32). Let this thought will be my motto in following considerations. I think it captures the essence of the goal set by the university itself. This objective is extremely important, burdened with a lot of responsibility, hence the institution of the university taking this challenge needs to be extraordinary.

In this article I want to look at the undergo university to market regulations. I am *a priori* put forward two thesis: (1) **the idea of the university in its assumptions presents a vision of the university, which is not possible to implement in the real world**, (2) **the problem of marketization of the university is multidimensional and cannot be assessed solely on the basis of negative consequences**. Perhaps my proposal could be considered a cliché, but as a matter of appropriately matching arguments I will try to show that the position outlined in the thesis will not be accepted from obvious.

The structure of the sequence shows a reflection on the classic idea of a university, a paradigm shift in higher education, strategies of connecting the mission of the university with requirements of the economy and the consequences turned out from that. The whole is finished with a summary and my own proposal of combine the university with market regulations. Portions requiring special emphasis will be at work in bold.

2   CLASSIC IDEA OF THE UNIVERSITY

University since its inception has a special place in the social structure and culture. Kazimierz Twardowski (1992, p. 462) emphasizes that it has to perform the momentous task expressed as: "(...) the acquisition of scientific truths and probabilities and to foster the skills of their investigation". Founder of the Lvov-Warsaw School compares university to the lighthouse, which illuminates the way ships on a stormy sea, becoming a guiding star for navigating the unknown waters of sailors (Twardowski, 1992, pp. 464–465). It is therefore identified with compass, lodestar or gyroscope, so that a man knows which path in life should follow. The human being must in fact be independent and responsible for itself and others, rather than lifting the surface and depends on current water mimicry.

Pope John Paul II as a long-term academic scientist and researcher expressed the essence of the university as an **earnest search for the truth** and selfless passing her young, and those who learn the rules of strict reasoning to act in a righteous and better serve the human community (John Paul II, 1990).

In strong relation with this is connected **the freedom and autonomy of the university**, which is also an inherent feature of the university ethos. This "academic freedom" is a guarantee provided for all involved in teaching and research, allowing on the chosen field of knowledge seek truth according to the methods of the relevant area and share the results of this research through teaching and publication with respect for individual rights and social in the light of truth and the common good (Rynkiewicz, 2009–2010, p. 164). It is important that the scientist dealing with issues of interest will move in the area of his competence, being convinced of discovering truth, or support it. This freedom cannot be unlimited, unquestionable and absolute, because in this case it would wear the yoke of utopia (Tołłoczko, 1996, p. 241). You also cannot lose sight of the fact that the implications of responsibility for the matter of freedom. In the face of foregoing considerations should be given the validity of separation the university freedom in two dimensions. The first is carried out in the performance of its functions by the university - that is inner autonomy based from the academic tradition. The second is the lack of freedom in the form of external pressures on the professionalism and demands of the labor market (Denek, 2004, p. 62).

Didactic task of the university is to **develop theoretical thinking**. It prepares for the role of the not-humble researcher, opens young man intellectual horizons instead of locking it in tight schedules of professional roles and to follow the algorithms written by others. University differs from vocational schools that do not prepare specialists (sometimes in name only) with a narrow range of knowledge and skills. It provides wide, well established knowledge base, which supplemented with specialized practical preparation (outside of the university) can take a variety of professional roles, and if necessary, quickly change according to the situation on the labor market (Brzeziński, 2004, pp. 51–60).

An important category is **openness of the university**. It takes place at three levels: (1) **openness of the university** "from the inside" refers to exceeding the learning model, readiness for its extension, refinement of research tools, (2) openness to the truth generates more autonomy and helps avoid narrowing the horizon for immediate action for the economy, but to serve the purpose inherently cognitive, human - personal, (3) openness of the university university "from the outside" demands for cultural pluralism, freedom of research and publication, open dialogue and free development of the human creative spirit (Krąpiec, 1982,

p. 337).

At the university is constantly cultivated the value of truth, freedom, tolerance, and the timeless nature of transnational science, social service, connectivity of research and teaching, dissemination of knowledge, social and professional relationships, and self-reliance and responsibility (Lewowicki, 2004, p. 45). Thus, **the university is a place endowed with dignity and honor**. His esteem manifests itself in costumes, titles, symbols, formulas, promises, forms, diplomas, academic ceremonies, etc. Very important is also the directory of values regulating the activities of professors and students. In this area indicate, among other things: truth, freedom, tolerance, the transnational nature of science, social service, research and teaching, dissemination of knowledge, social or professional ties in academia, self-management, responsibility (Lewowicki, 2004, p. 45).

3   MARKET TRANSFORMATION AND THE UNIVERSITY

It is obvious that the labor market is one of the main recipients of the effects of the education system. **Nowadays the higher education paradigm has changed** – with the increase of demand for higher education it has become necessary but not sufficient for success in the labor market. The reason for this lies in the increase percentage of students entailing the phenomenon of inflation diplomas. It is also observable mismatch between the technical ("hard") and non-technical ("soft" - emotional, social) skills (Szafraniec, 2011, p. 137).

At present, **the overlap between education and work has become a reality** because of the education system participants enter the labor market, as well as members of the labor market participate in education in order to increase their own competence (Fedorowicz and Sitek, 2010, p. 241). However, it is possible to indulge in educational activities and work in different proportions. According to the statistics contained in the Polish government report according to increasing age decreases participation in formal education in favor of work (Fedorowicz and Sitek, 2010, p. 259).

Empirical data defend the thesis that in most economies of the OECD countries there is a strong demand for high skills and the labor market is paying for them a high price in the form of payment (Fedorowicz and Sitek, 2010, p. 252). On this basis, one can conclude that the value of higher education has a stable position with an upward trend. The problem of unemployment due among other things to the fact of **mismatch skills acquired while learning to the needs of the employers**. Conclusion that the unemployment rate is largely the result of incompatibility of demand and supply of labor is derived unanimously by many theorists and practitioners (Fedorowicz and Sitek, 2010, p. 244). Thus, the process of education and its contents are anachronistic (Boni, 2008, p. 142). Moreover, the present is another problem – **education did not adequately prepare to enter the labor market and perform tasks specific to a particular job** (Fedorowicz and Sitek, 2010, p. 267). In the eyes of employers often employees with appropriate university degree cannot perform the tasks assigned to the position. Therefore formal education still does not prejudge anything, it not translates into having the desired practical skills. Higher education was accused of improper professional practice, the dominance of theory over practice, the lack of exchange of information with the industry, lowering the level of preparedness of students and low flexibility in adapting to the needs of employers. **The employer is therefore forced to bear all the costs (money, time, efficiency, etc.) of self-training some employee to work** (Fedorowicz and Sitek, 2010, p. 267).

Idealism idea of a university is an obstacle in the way of its materialization. Allan Bloom in his widely discussed book *Closing of the American Mind* makes clear the idea that the fundamental problem of the modern university is completely blur the notion of truth in the direction of truth relativism, or even denial of the existence of absolute truth. There is therefore no point in continuing virtue of the pursuit of truth (Polakowski, 2007, p. 44).

4   COMBINING UNIVERSITY EDUCATION AND MARKET REQUIREMENTS

After the reform of Wilhelm von Humboldt clearly constituted the view, that the task of the university is only conducting research and implementation of educational obligation. The university is sometimes portrayed as "ivory tower" in which academics are locked deaf to the needs of society and practice, because they only deal with the enigmatic understood desire to discover the truth. Kazimierz Sowa argues that such notion has nothing to do with the academic tradition, because the mission of university merge three timeless elements: research, teaching, social service (Sowa, 2009, p. 14, 18). The university is also responsible for the shape of the social elite. It provides not only scientists, but also a large group of educated people. Obviously university is not involved in the organization of the labor market, but nevertheless it has a partial influence on the determination of the elite level (Przyszłość uniwersytetu, 2011, p. 235). M. A. Krąpiec argues that engagement the university with the economy is a process quite common and natural. It allows for the implementation of short-term social objectives conducive to fill jobs, growth of national prosperity and increase its importance in comparison with other countries (Krąpiec, 1982, p. 322).

In the history of the university connection its theoretical mission with social institutions practice took many different forms. It is worth to point to examples of three basic models of the European University: German, French and British.

German university model is generally identified with the figure of Immanuel Kant and Wilhelm von Humboldt. During Kant's curriculum the university was neither like modern educational and research nor vocational oriented higher education institution. It was in fact something of a loose connected scholars. Old state university was consisted of four faculties broken into two stages. Lower faculty - philosophical - have an introductory character. Higher faculties - theology, law and medicine - prepared priests, government officials and medical doctors for the public (Żelazny, 2003, p. 13). As emphasized Mirosław Żelazny "direct aim of three higher faculties are therefore not the phenomena and laws of nature studied by theoretical mind, but referring to the idea of freedom moral values of practical mind. In this sense, all three faculties are subject to state authority in the field of law, while the scholars and graduates, as experts formed a "scientific police", prevail which forms of truths in a particular country are acceptable and which should be considered as religious heresy, worship of lawlessness and charlatanism" (Żelazny, 2003, p. 27). Thus, in accordance with the ideals of Kant, the university community should be a good servant of the republic form and dependent in part to the state (Żelazny, 2003, p. 18). Königsberg philosopher postulated that the university has become a high-school with high authority which provides the opportunity to decide what in the realities of the state will be considered to be right and true. The task of create science, and its empirical verification has been supplanted outside the university. It was not until the seventeenth century scholar could present the research results within the walls of their Alma Mater under the guise of the philosophical faculty, which allow the possibility of free discussion on all matters (Żelazny, 2003, pp. 36–37).

In 1810, when Wilhelm von Humboldt was appointed Director of the Religion and Education

Section of the Ministry of Internal Affairs of Prussia he presented the revolutionary program organization of the university as an institution which creates, teaches and verifies science. This syncretic offer combined into one all research institutions in Berlin (Żelazny, 2003, p. 36). It is worth noting that the research work, in this sense, has moral significance. Humboldt postulated that on university professor can proclaim *ex cathedra* own claims, as well as approved the concept of the university independent of any religious, but subjected to state sovereignty as a financing entity (Antonowicz, 2005, p. 30). Humboldt concept clearly emphasized the unity of knowledge, professors and students, research and education. The unity of knowledge expressed in the notion that the branches of science are combined in general knowledge. Therefore they should not be separate. Unity of students and professors assumed that the teachers do not have a monopoly on truth, because it is not product but process. The unity of teaching and research involved common research, as the best way of teaching (Hejwosz, 2010, pp. 75–76). At that time, the division was formed on *Naturwissenschaften* (learn mathematics and science) and *Geistwissenschaften* (Humanities on spiritual development) (Żelazny, 2003, p. 37). In this dimension the social function of the university is closely linked to the needs of the state, because it takes the practical task of leading youth (Antonowicz, 2005, p. 31).

English universities for a long time preserved its medieval structure independent units (college) in economical, didactical and organizational way (Bartnicka and Szybiak, 2001, p. 148). The creation of the British model is associated with a Cardinal John Henry Newman lecture proclaimed during the public debate about the idea of the university in 1852. In this concept priority for university constitute its educative and education role (Antonowicz, 2005, pp. 29-30). Its aim was to broaden horizons, to made transformation of the mind, habits of thinking and to enter into social and civic interactions (Hejwosz, 2010, p. 78). Academic knowledge should meet high quality standards and should be cleaned from utilitarian-vocational connotations and serve the common good. Conducting research was the domain of external, not associated with the university institutions (Antonowicz, 2005, pp. 29–30).

Establishment of **French universities** is associated with their renewal by Napoleon. Due to the centralization of higher education area has been deprived of autonomy for the direct control of statist apparatus under the auspices of the Minister of Education (Antonowicz, 2005, p. 28). French universities had a high school special nature of a training according to the needs of the state. Research did not belong to the tasks of the university (Hejwosz, 2010, p. 75).

5 BENEFITS OF COMPOUNDING MARKET REGULATIONS AND THE UNIVERSITY

The university cannot be naive dreamy look to the future, but consciously look for the link between education and future careers of their students (Kościelniak and Makowski, 2011, p. 11). **The ability to predict the direction of changes in the labor market can better target educational activities to the needs of the labor market in the coming years** (Fedorowicz and Sitek, 2010, p. 279). The question is how to do it in practice? It is because of the openness on the relationship of the university to the labor market and business will be possible to develop common solutions. An example may be the Netherlands, where for 23 sectors of the economy have been created so-called expertise centers where are prepared, in cooperation with the social partners, relevant recommendations for the evolution of vocational education. Based on this are developed and implemented education programs (Fedorowicz and Sitek, 2010, p. 269).

Connection science and business has its justification in the advisory voice of the other on all vocational matters with whom graduates will face after receive a diploma (Przyszłość uniwersytetu, 2011, p. 240). Such action aims at, *inter alia*, **reduce the danger of unemployment among university graduates**. Is currently being developed in Europe the model of flexible labor market called *flexicurity*. It pay attention on seven factors: job security supplemented by labor mobility, developed a system of continuing education and lifelong willingness to learn, spatial mobility, unconventional forms of employment, flexible labor laws and wages, cost-effectiveness work for the tax and social security, effective system of recruitment and participation (Boni, 2009, p. 99). Currently, it is recommended to increase pressure on the qualifications as an essential condition for success in the labor market (Boni, 2009, p. 112). Not without significance is the willingness to permanent training, switching theoretical knowledge into practical skills and increase their vocational mobility (Boni, 2009, p. 113).

Additional advantages of joining university and business would be the **dynamic development of some branches of knowledge, and building strong research institutes for business**. According to the entrepreneurial approach developed will be that, what potentially could bring a profit. This is the main goal for the type of entrepreneurial university. Mirosława Pluta-Olearnik identifies four orientations of that type of university: economic (emphasis on efficiency), market (taking care of the relationship with the labor market, business networking), innovative (demonstrates the usefulness of college), managerial (managing university-enterprise) (Pluta-Olearnik, 2009, pp. 23–26). Currently, for university management are necessarily specialists in management because it requires sophisticated knowledge, experience, knowledge of the tools and *know-how* (Przyszłość uniwersytetu, 2011, p. 240). **The functioning market model of the university promotes the growth of potential of the country, both internationally and in the dimension of the quality of internal capital.**

6 PROBLEMS ARISING FROM COMBINING UNIVERSITY AND MARKET REQUIREMENTS

On the entrepreneurial university knowledge has become a commodity sold to the student-customer. It can be bought, sold - sometimes several times to different social groups (students from various fields of study, lectures open to the public). However transmitted data, cannot be too complicated or abstract, because they are directed to an indefinite, mass audience that does not pass any selection by the university. It is rather fragmented "information mush" easy to absorb. Also, academic staff must adapt to a new audience fighting for their attention. Thus, for the exchange of outstanding university professors to teach semi-skilled *quasi*-experts of a practical area of life (Bauman, 2011, pp. 48–54). Learning stripped of metaphysical change in the driving force of industrial society of curvature mercantilism-utilitarian (Alarcon, 2010, pp. 9–10). Research shows that the education system has lost its function of granting the status. The value of academic diploma in graduates saturated market drops sharply (Szafraniec, 2011, p. 90).

Therefore **there has been shallowing level of university education resulting from the increase in the number of students**. More and more noticeable is the need to change course categorical of educational *boom* from the quantitative to the qualitative (Boni, 2008, p. 74).

Łukasz Stefaniak notes that the model of higher education, which is currently being implemented, is rooted in the concept of utopia, presupposes that the increase in the level of

education will translate into an increased sense of happiness. In addition, **limiting the development of science only to the areas which could be useful for state leads to an apparent depletion of a holistic dimension of science and produce ignoramuses with a master's degree** (Stefaniak, 2010, pp. 136–137). In this situation increase the risk of closure in rigid and narrow limits of intellectual implying weakness in the adaptation of the new working conditions. Current task posed in front of the university is to identify information that is relevant, useful, and displacement of the unnecessary and complicating student's lives. That spam filtering cannot be censorship and the transfer of knowledge relevant and useful - indoctrination (Drelich, 2007, p. 55).

Adaptation to the requirements of the politics, market trends, means giving yourself off course. Through the implementation of the Bologna model Humboldt's ideal of coexistence research and teaching is abandoned for the promotion of pragmatic education. Research will be conducted on behalf of the business agencies or private entities (Kwiek, 2011, p. 88). In the case of massifi university must respond dynamically to the changing wishes of the state, students, graduates, labor market research. The University was thus faced with a dilemma to reconcile sometimes conflicting expectations of various stakeholders (Kwiek, 2011, pp. 77, 84). His chief task has now become literally understood adaptation and adaptation to changing social and economic reality (Kwiek, 2011, p. 75).

Moreover, in the university to accommodate the political and economic requirements exposes the problem that Piotr Hübner (1994, p. 144) says: "(...) **science is not production, but it is an art** - this obvious truth does not reach the decision-makers, and even more to a regular employees of department dealing with the design standards and formulating decisions".

In the global economic sphere people are referred to as "human capital", which is the use of investing, arranging, or "resources", which must be properly managed (Szkudlarek, 2002, p. 90). In fact we are dealing with the **dehumanization of man**.

7 CONCLUSION

Linking university education organized by the classical vision of *Alma Mater* with the requirements of the labor market (in wider sense economy) is similar to the dispute between the opposition qualities: on the one hand general – detail, and on the other hand theory - practice. Those approaches does not need to be competitive, but may be complementary. In accordance with Jerzy Woźnicki I would point out the need to develop a strategy evolution of the higher education institution taking into account the external volatility (in the political, economic, social dimension), impact assessment of non-permanent environment of universities, develop own strategy and internal changes inside studies system, organization and management, quality assurance. This strategy should be associated with an appropriately adjusted market categories: **market - but academic, competition - but also cooperation, customer - consumer, diversified, not always having a right, management - and representation of the environment, profit - but not as a primary objective** (Woźnicki, 1996, p. 48).

In addition, it would be erroneous assessment of the quality and relevance of university trying to combine with the requirements of the economy solely through the prism of bitter negativity or carefree euphoria. The prospect of this cooperation brings both interesting opportunities and threats. The strategy seems to be simple - should seek to maximize the benefits and leveling threats in the Aristotelian principle of the golden mean.

In my opinion, the ideal solution would be a fragmentation of the education system on the introducing part taking care of growing the humanistic part in people and the part of the practical and vocational preparing to perform certain duties. This solution essentially synthesized university with market requirements while maintaining esteem and universities in pursuit of social expectations. Universities as a special kind of education should take care of their own individuality in fulfilling the task of training the elite intellectual culture and multiply at a high level. They guard the value of science and maintaining the standards of intellectual, methodological and ethical issues. In addition, the university needed a contemporary masters and guides who will lead students and also academic staff as students partners (Szymanski, 2004, p. 79). Perhaps a second area of education will be carried out outside the university, because this institution is not (and will not for a long time) ready to represent the level of specialized professional institutions.

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CATEGORIZATION AND OFFER IN TOURISM USING ANALYTIC HIERARCHY PROCESS - AHP METHOD

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ABSTRACT
Although there are many different quality services and features in nowadays tourism, new business ideas emerge on daily basis. Even during the global crisis period people tend to travel at least during the summer or winter vacation. There are numerous factors that influence the final choice of the preferred tourist destination like travel distance, sights attractiveness, nightlife possibilities, reputation of the destination, shopping possibilities, the cost of travel and the price level at the destination. Analytic Hierarchy Process (AHP Method) is well known decision-making tool that represents strong support in any business sector or private life. Making final decision represents very complicated process if there are many available or possible alternatives or if indecision appears. Suggested way of the categorization and classification in tourism with AHP Method as decision-making tool both improves tourist offer and drastically simplifies the ideal destination selection process for travellers. Most common factors - criteria that influence the choice of travel destination were obtained by survey.

Keywords: AHP Method, Categorization in Tourism, Saaty's Scale, Travel Agency Offer

1 INTRODUCTION

Any idea or component that can improve tourism sector must be taken seriously since tourism income represents an important source for expansion and modernization of infrastructure in a country (Bhatia, 2006, p. 41) as well as it is a great employment generator. Tourism nowadays offers a variety of options, actions, discounts and possibilities. The purpose of the paper is to simplify the decision making process and to adapt the whole process of choosing destination to customer needs. Most customers already have their intended destination, still there are many who prefer to look at the offer and choose the perfect or ideal one. There are many factors which stimulate the desire to travel: art, music, architecture, engineering achievements and many other areas of activity have tourist appeal (Goeldner, 2009, p. 280). These factors form following categories or types of tourism: ethnic tourism, cultural tourism, recreational tourism, historical tourism, environmental tourism, business and conference tourism, health tourism, event and nightlife tourism, yet it is hard to uniquely define tourism categories because distinctions between the categories are not always clear (Wall, 2006, p. 27) and they vary depending on the author. There are also many factors that limit people and narrow their choice of destinations like lack of free time, very distant routes or financial limitations - especially in times of crisis. For this reason and further due to constant

competition increase and because of more new services emerging on daily basis, any novelty or addition in the tourist offer is often crucial for success.

2   CRITERIA FOR THE DECISION

Regarding the categories of tourism and motivators that encourage people to travel, certain patterns and experiences form most common criteria that influence both selection and final choice of travel destination. The survey was made in order to answer the question: "Which criteria are crucial in the process of choosing travel destination for vacation?". Business and obligatory trips are excluded from this study because in these specific cases people do not choose where to travel.

2.1   The Survey

To get most common criteria that influence the process of choosing travel destination people were asked to indicate three (3) most important criteria for making the decision when planning to travel.

Question from the survey:
1.   *Name three (3) main criteria for choosing where to travel for vacation?*
Survey was conducted via email and responses were collected from 179 random and anonymous persons. Five most common criteria were highlighted as shown in Chart 1. There are total of thirteen different criteria indicated with frequencies as follows:
1. Cost of travel - (97)
2. Nightlife possibilities - (81)
3. Sights attractiveness - (99)
4. Travel distance - (88)
5. Shopping possibilities - (28)
6. Place reputation ("Brand" places) – (67)
7. Local prices level – (27)
8. Exploring exotic cultures – (13)
9. Swimming possibility – (9)
10. Usual local weather conditions – (4)
11. Religious contents or events – (7)
12. Way of transportation – (14)
13. Skiing possibility – (3)

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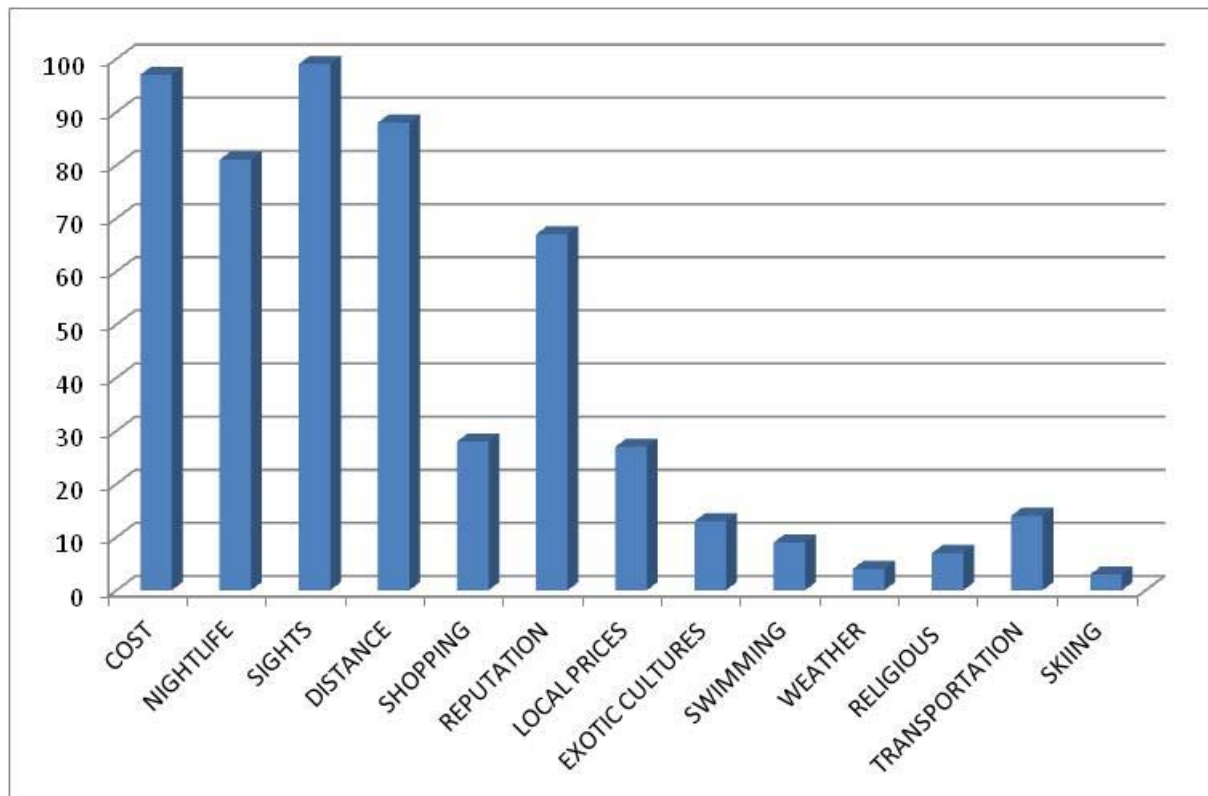
Chart 1: Survey results: all mentioned criteria and their frequencies

Besides the fact that sights attractiveness, cost of travel, total distance, nightlife possibilities and place reputation emerged as most important ones, some specific situations exclude the need of even mentioning some criteria. During summer vacation for example, when most people want to travel to a seaside, there is no need to mention swimming possibility because that is usually expected or "a must have option". Same thing happens in winter period when people go skiing.

2.2   Criteria: survey vs. business and personal experience

Mentioned survey does not have scientific support that is strong enough to make one general model out of obtained information, but that is also not the purpose of the paper. The purpose of the paper is to offer Analytic Hierarchy Process (AHP Method) as a tool for making best choice. Criteria can be defined or found in many different ways. It is important to emphasize that travel agencies can define criteria they find important by themselves. It is also advisable to give customers the possibility of specifying the criteria that they consider relevant or indicate as important. This small survey only helped this study to get some most common ones. After relevant criteria are defined, the process of making final and best choice goes to the next step.

3   TRAVEL   AGENCY   OFFER: ALTERNATIVES   AND   THEIR   CATEGORIZATION USING DEFINED CRITERIA

Chosen criteria are further used for categorization of each destination which is included in travel agency offer, or in other words to evaluate each criterion of offered destination. This is made by rating each criterion by different numerical value out of chosen range, and each

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numerical value stands for certain characteristic. Example of destination categorization and criterion evaluation is shown in Table 1.

Table 1: Example: Categorization of travel agency offer and evaluation of each criterion

	SIGHTS	COST	DISTANCE	NIGHTLIFE	REPUTATION
Destination A	0,25	0,50	1	1	1
Destination B	1	0,75	0,75	0,50	0,75
Destination C	0,75	0,75	0,50	0,25	0,25
Destination D	0,50	1	0,25	0,25	0,25

Evaluation of each criterion is described with the example below:

Chosen range for evaluation: rating with 4 levels of evaluation
Sights attractiveness:
0,25 – very few sights
0,50 – average
0,75 – more than average
1,00 – place is well known as cultural sights centre

Cost of travel:
0,25 – very expensive
0,50 – average
0,75 – affordable
1,00 – low-cost

Distance:
0,25 – far-off
0,50 – average
0,75 – close
1,00 – "neighborhood"

Nightlife possibilities:
0,25 – no options
0,50 – average
0,75 – many options
1,00 – nightlife centre

Place reputation:
0,25 – not a famous place
0,50 – average
0,75 – well known place
1,00 – highly attractive and famous place

Since there are customers who find some usually negative criterion values as positive ones, this categorization and evaluation must be easily adjustable to a customer needs. For example, people who prefer luxury do not find attractive something that is low-cost, or ones who are trying to rest in a quite place do not find nightlife centre attractive.

4 IMPORTANCE OF CRITERIA IN THE SERVICE OF FINDING BEST CHOICE

After previous step has been properly done, customer assigns certain level of importance to each mentioned criterion depending on his personal preferences. The rest of the process is based on earlier mentioned AHP method, which was developed by Thomas L. Saaty, American mathematician. In using the AHP to model a problem, one needs a hierarchic or a network structure to represent that model, as well as pair wise comparisons to establish relations within the structure (Saaty, 2012, p. 3). Therefore all criteria have to be compared with each other with purpose to get an order of importance for each customer. The comparison is made using Saaty's scale (Table 2).

Table 2: Saaty's Scale Of Absolute Numbers (Saaty, 2006, p. 3)

Intensity of Importance	Definition	Explanation
1	Equal importance	Two activities contribute equally to the objective
3	Moderate importance	Experience and judgment slightly favor one activity over another
5	Strong importance	Experience and judgment strongly favor one activity over another
7	Very strong importance	One activity is favored very strongly over another, its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation
2 – Weak, 4 – Moderate plus, 6 – Strong plus, 8 – Very, very strong (Intermediate values) Intensities 1.1, 1.2, 1.3 etc. can be used for elements that are very close in importance.		

Using the table above customer is asked to specify which criterion dominates over another. As mentioned earlier, comparison is preformed pair wise. Example of collected information on criteria importance is show in Table 3.

Table 3: Example of customer possible preferences (criteria comparison)

	SIGHTS	COST	DISTANCE	NIGHTLIFE	REPUTATION
SIGHTS	1	5	7	9	3
COST	1/5	1	5	9	3
DISTANCE	1/7	1/5	1	3	1/5
NIGHTLIFE	1/9	1/9	1/3	1	1/7
REPUTATION	1/3	1/3	5	7	1

If criterion A has moderate importance over criterion B for example, it will be shown with number 5 (as specified in Saaty's scale). Reciprocal value (1/5) is immediately assigned as importance of criterion B over criterion A.

Results shown in table above indicate that place reputation for example has strong importance over distance, very strong importance over nightlife possibilities, yet both sights attractiveness and cost of travel have moderate importance over that criterion. In other words, whole number stands for domination while fraction stands for subordination of one criterion over another.

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The process of finding the exact importance of each criterion continues by calculating fractions and column sums further as shown in Table 4.

Table 4: Calculated fractions and column sums (base for normalized matrix)

SIGHTS	COST	DISTANCE	NIGHTLIFE	REPUTATION
1	5	7	9	3
0,20	1	5	9	3
0,14	0,20	1	3	0,20
0,11	0,11	0,33	1	0,14
0,33	0,33	5	7	1
1,78	**6,64**	**18,33**	**29**	**7,36**

*Hint: column SIGHTS elements (numbers 1; 0,20; 0,14; 0,11; 0,33) are all divided by 1,78, column COST elements (numbers 5; 1; 0,20; 0,11; 0,33) are all divided by 6,64 etc.

Each element obtained using Saaty's scale is further divided by its column sum to get normalized matrix as shown in Table 5.

Table 5: Criteria importance

0,5618	0,7530	0,3819	0,3103	0,4077	**0,48**
0,1124	0,1506	0,2728	0,3103	0,4077	**0,25**
0,0787	0,0301	0,0546	0,1035	0,0272	**0,06**
0,0618	0,0166	0,0180	0,0345	0,0190	**0,03**
0,1854	0,0497	0,2728	0,2414	0,1359	**0,18**
					∑=1

Importance (weight) of each criterion is finally calculated as row average. Example shows that observed customer indicates sight attractiveness as most relevant criterion when deciding where to travel. This criterion has importance intensity of 48%. Cost of travel has 25%, traveling distance only 6%, nightlife possibilities even less (3%) and place reputation has 18% of importance.

5 FINAL RESULT – PERSONALIZED EVALUATION

Since offered destinations are already rated (Table 1.), the only thing left to do is to calculate new evaluation of each destination customized and adjusted to customer requirements. Process is finalized by multiplying each rate by percentage assigned to each criterion (Table 6).

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Table 6: Final result based on customer requirements

	SIGHTS	COST	DISTANCE	NIGHTLIFE	REPUTATION
Destination A	0,25	0,50	1	1	1
Destination B	1	0,75	0,75	0,50	0,75
Destination C	0,75	0,75	0,50	0,25	0,25
Destination D	0,50	1	0,25	0,25	0,25
Customized evaluation of each destination based on customer preferences					
Destination A	0,12	0,125	0,06	0,03	0,18
Destination B	0,48	0,1875	0,045	0,015	0,135
Destination C	0,36	0,1875	0,03	0,0075	0,045
Destination D	0,24	0,25	0,015	0,0075	0,045
Final standings (row sum)					

Destination B	0,8625
Destination C	0,63
Destination D	0,5575
Destination A	0,515

Initial evaluation (Table 1. row sums) shows results as follows:
Destination A: 3,75
Destination B: 3,75
Destination C: 2,50
Destination D: 2,25

Whole process is based on new way of travel agency offer categorization. If initial categorization is properly done, all customers can get their "perfect destination" after indicating their importance of each criterion over another. It surely means that best calculated destination indeed perfectly suits customer requirements, although human factor with subconscious can impact on customer final choice. This tool only offers one way to meet customer needs with purpose to refresh and innovate travel agencies range of services, which is extremely important since innovation provides "first mover advantage" (Hall, 2008, p. 33).

6 CONCLUSION
Travel agencies nowadays already have great competition with on-line services development, (Booking.com for example) therefore any refreshment in approach to customers can be crucial for their business success. Although mathematical result does not always assure customer's satisfaction, described method separates attractive options from unattractive ones due to customer's preferences clearly. This study represents an easy way to offer something different without any expenses in time of global crisis.

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CENTRES OF THE ECONOMY IN THE ASIA-PACIFIC REGION: CITIES IN THE SHADOW OF TOKYO AND BEIJING

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ABSTRACT

In studies concerning metropolises, it is Tokyo, and to some extent Hong Kong, Osaka, Seoul and Sydney that are generally mentioned as major economic centres in the Asia-Pacific region. Recent years, however, have seen radical changes in global economy (among other things the global economic crises emerging in 2008), and, as a result, the position of cities, which has been thought to be constant, has changed considerably. It is well documented that the major cities of developing countries – primarily China, India and most of the Southeast Asian economies – have closed the gap to the traditional centres, and in several cases they have also seized regional control and command functions. The aim of this paper is to examine how the position of cities in the Asia-Pacific region changed in the period from 2006 to 2011. In the second part of the paper we will compare the functions of Tokyo and Beijing as the most significant control and command centres in the region.

Keywords: Beijing, Command and control functions, Global economy, Headquerters, Tokyo

1 INTRODUCTION

Since the 1970s, an increasing number of socio-economic studies have been conducted to demonstrate changes in the global economy via the economic parameters of cities (Friedmann, 1986; Beaverstock et al., 1999; Sassen, 2006). A popular orientation of research is represented by analyses that focus on the control and command functions of cities, where the spatial concentration of multinational companies (MNCs) is regarded as an important indicator (Godfrey and Zhou, 1999; Alderson and Beckfield, 2004; Allen, 2010; Derudder et al., 2010; Taylor and Csomós, 2012). Due to the situation of the global economy over this period, the initial studies looked at the cities of the developed world, particularly the United States, Western Europe and Japan (Hall, 1966; Jacobs, 1969; Hymer, 1972; Heenan, 1977; Friedmann, 1986). Then, from the middle of the 1980s – primarily owing to the growing economic strength of China – the Asia-Pacific region gradually gained and new economic nodal points emerged in addition to the major Japanese cities (Tokyo, Osaka and Nagoya).

This process can be tracked in the current orientations of research. According to the world city hierarchy defined by Friedmann (1986), Tokyo (primary core city), Sydney (secondary core city) and Singapore (semi-peripherial primary city) dominated in Asia-Pacific, while the other cities of the region continued to play rather peripheral roles. The studies of the following decade were largely dominated by Sassen's work (1991), The Global City (Taylor, 2004). According to Sassen (1991, p. 4), changes in the functioning of cities have had a massive impact upon both international economic activity and urban form: cities concentrate control over vast resources, while finance specialized service industries have restricted the urban social and economic order. Thus a new type of city has appeared. It is the global city. Leading examples now are New York, London, Tokyo, Frankfurt, and Paris. Among global cities, Asia-Pacific was essentially represented only by Tokyo, though Sassen (1991, p. 174) pointed out that Hong Kong has been a key intersection of different worlds, forever a strategic exchange node for firms from China to the rest of the world and from the rest of the world to

China, as well as among all the overseas Chinese communities. Beaverstock et al. (1999) ranked 122 cities of the world on the basis of the spatial concentration of advanced producer services (GaWC inventory). Their studies concluded that Tokyo, Hong Kong and Singapore belonged to the group of alpha world cities, Sydney and Seoul were beta world cities, while gamma world cities also included two Chinese cities: Beijing and Shanghai. In fact, similar results were yielded by the other research work of the period: Asia-Pacific was connected to the global economy primarily via Tokyo, Hong Kong and Singapore, while other (mostly gateway) cities (e.g. Bangkok, Beijing, Jakarta, Kuala Lumpur, Mumbai, Shanghai, Shenzhen, Taipei City) took regional roles (Friedmann, 1995; Beaverstock et al., 2000; Taylor et al., 2002; Sim et al., 2003; Taylor et al., 2004).

The first years after the turn of the millennium saw the emergence of several studies calling attention to the fact that the major cities of the Asia-Pacificn region were striving for dominant roles in the sectors formerly mainly dominated by European, Japanese and North American cities (Gu and Tang, 2002; Taylor et al., 2002; Yulong and Hamnett, 2002; Hutton, 2004; Taylor, 2011; Yeung, 2011). Hanssens et al. (2011) examined the sectoral network connectivities of 307 cities across the world in 2000 and then in 2008, in the sectors of accountancy, advertising, financial services, law and management consultancy. According to these results, the largest growths in connectivity were shown by the Chinese cities, primarily Beijing and Shanghai, as well as Seoul, Mumbai, Kuala Lumpur, Hong Kong and Singapore in certain sectors. Therefore, the dominance of the major cities of Asia-Pacific increased in those sectors (advanced producer services) that had formerly been characteristic mainly of global cities (Sassen, 1991) and alpha world cities (Beaverstock et al., 1999).

The financial and subsequent economic global crisis which emerged in 2008 has impacted on national economies to a differing extent, and rearranged the global positions of the cities (Rose and Spiegel, 2012). According to UN-HABITAT (2011), recently the Top40 global cities ranking is headed by New York and London followed by the major cities of Asia-Pacific: Hong Kong, Singapore, Beijing, Shanghai and Tokyo. The analysis claims that just within ten years a change will occur: New York and London will be able to maintain their leading positions, but Shanghai and Beijing will close up to the 3rd and 4th place, while Mumbai will occupy the 7th place behind Hong Kong and Singapore, but ahead of Tokyo. Recently, the global and regional strengthening of China – and parallelly Chinese cities – is clearly documented by a number of current studies (Logan, 2002; Yulong and Hamnett, 2002; Zhao et al., 2003; Lin, 2004; Wu, 2005; Li et al., 2012).

Our analysis examines the command and control functions of the cities of the Asia-Pacific region, and we then use this as the basis for a type of city ranking. Although Godfrey and Zhou (1999) have argued that headquarter functions are a poor way of measuring the 'global urban hierarchy' – particularly in under-estimating the importance of 'third world cities' – and they suggest more emphasis be given to regional headquarters that reflect strategic location decisions rather than simply where a company first started. However, while accepting the above-mentioned criticism, we think that changes in the control and command functions well reflect changes in the processes of the global economy (Taylor and Csomós, 2011).

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2   DATA ORGANIZATION AND METHODOLOGY

2.1   Multinational Enterprises

For the purpose of the comparative analysis, the Forbes „The Global 2000" 2006 and 2011 rankings have been used. Forbes ranks the world's 2000 largest public companies with respect to four typical parameters of these companies: revenue, assets, profit and market value (in our later calculations, we have also used these parameters). Concerning the underlying ratios, the most dynamic growth (6.1% on average) has taken place in the Asia-Pacific region, primarily fuelled by the sky-rocketing Chinese economy (Lee and Hong, 2012).

In the years under review, Japan had the largest number of Forbes companies, though compared to 2006 this number dropped by nearly 19%, while China witnessed a 160% increase. In 2006, Japan topped the rankings for all four of the economic parameters used to measure the companies, yet by 2011 China came to the fore with respect to both profits and assets. These two economies clearly stand out against the other countries of Asia-Pacific, with South Korea and India (although obviously with by no means negligible performances in international terms) lagging far behind.

2.2   GICS sectors

The Forbes 2000 companies have been categorized on the basis of the Global Industry Classification Standard (GICS) developed by Morgan Stanley Capital International (MSCI) and Standard & Poor's. GICS consists of 154 sub-industries, 68 industries, 24 industry groups and 10 sectors. From the perspective of the analysis, a major advantage of the application of the analysis is that until 2010 Forbes also preferred to use the GICS industrial group classification, and then from 2011 they switched to a more detailed classification, relying instead on the characteristics of different sectors, which obviously results in a sector-based categorization (Taylor and Csomós, 2012).

By 2011, the number of Forbes companies increased in all the GICS sectors, with the exception of telecommunications services, where it decreased by one. In 2006 and 2011 the financial and industrial sectors accounted for more than half of the companies. On the other hand, the relatively high proportion of companies operating in the financial sector suggests that more than 30% of these companies were not performing productive operations in either year.

2.3   Metropolitan Areas

We do not treat headquarter (HQ) cities as independent units, but have grouped them into more extensive metropolitan zones. The metropolitan zones have primarily been identified on the basis of the definitions of the national statistical offices concerned. For instance, Tokyo in the analysis effectively corresponds to the Tokyo Urban Employment Area, including – among others – the cities of Chiba, Kawasaki and Yokohama. The other chapters of the analysis interpret HQ cities as being identical to the HQ metropolitan areas. Both in 2006 and 2011, Japan had the largest number of HQ cities, but in the reviewed period the number of HQ cities in China increased by more than 400%.

2.4   Methodolgy

As has been mentioned above, the weights of the individual cities have been determined considering four typical parameters of companies, relying on the following method:

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Companies operating in HQ cities have been classified into the appropriate GICS sectors, broken down into the individual cities. In the majority of the cities, the companies have been interested in only one sector, while in larger cities there have been several sectors involving several companies (in both years under review, Tokyo was the only city where companies operated in all the ten GICS sectors).

The weights of the cities have been determined for 2011 and 2006, in a breakdown for the GICS sectors, for each of the parameters.

$$Weight_{city,sector,year} = \frac{WR_{city,sector,year} + WA_{city,sector,year} + WP_{city,sector,year} + WMV_{city,sector,year}}{4}$$

Where:
- WR$_{city, sector, year}$ = the percentage of revenues in a given headquarter city in a given GICS sector a given year
- WA$_{city, sector, year}$ = the percentage of assets in a given headquarter city in a given GICS sector a given year
- WP$_{city, sector, year}$ = the percentage of profits in a given headquarter city in a given GICS sector a given year
- WMV$_{city, sector, year}$ = the percentage of market value in a given headquarter city in a given GICS sector a given year

3 CITIES AS CENTRES OF THE ECONOMY IN THE ASIA-PACIFIC REGION

Recently, Asia-Pacific is the hottest area of global economy (Lee and Heshmati, 2009), where the rate of economic growth in several countries of the region has remained up at double digits in spite of the global economic crisis (Lee and Hong, 2012). There is sharp competition between the world's second and third largest economic powers, i.e. China and Japan (Chen and Hsiao, 2008), while the economic performance of several developed countries (Singapore, South Korea) and emerging economies (India, Indonesia, Malaysia, Thailand) of the region is enhancing by leaps and bounds. This is a fairly complex environment that sets even cities with regional command and control functions to be in continuous movement. While in North America the leading position of New York or that of London and Paris in Europe is not challenged by any other city (Taylor et al., 2009; Csomós and Derudder, 2012), in Asia-Pacific the formerly dominant Tokyo has been closely approximated (and furthermore overtaken in some areas) by Beijing (Lee et al., 2012).

As is shown by Table 1, the HQ cities ranking – irrespective of the changes in the sectors – continues to be topped by Tokyo, although its weight dropped by nearly 40% in the period under review. In 2011, Beijing came second, ahead of Seoul and approaching Tokyo. Seoul fell back to fourth, while the third place in the 2011 rankings was occupied by Hong Kong. From Table 6, it is clear that the Japanese cities in general lost a lot of their weight; in total the value of Tokyo, Osaka, Toyota, Nagoya and Kyoto shrank by half. Nevertheless, growth was not solely a characteristic of Chinese cities, though it is undoubted that the change turned out to be the most spectacular in the case of Beijing and Hong Kong. Smaller increases were achieved by Indian cities (Mumbai and Delhi), as well as by Singapore, Kuala Lumpur and Bangkok.

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Table 1: Top10 headquarter cities by total weight, 2006/2011

Rank	City	Country	Weight 2006	City	Country	Weight 2011
1	Tokyo	Japan	37.71	Tokyo	Japan	23.15
2	Seoul	South Korea	8.43	Beijing	China	18.68
3	Beijing	China	6.45	Hong Kong	Hong Kong/China	8.11
4	Osaka	Japan	5.90	Seoul	South Korea	7.16
5	Hong Kong	Hong Kong/China	5.66	Melbourne	Australia	3.88
6	Melbourne	Australia	4.06	Sydney	Australia	3.57
7	Sydney	Australia	3.55	Mumbai	India	3.28
8	Taipei City	Taiwan	3.21	Osaka	Japan	2.70
9	Toyota	Japan	2.71	Taipei City	Taiwan	2.55
10	Singapore	Singapore	1.94	Shanghai	China	2.49

Tokyo, Beijing, Hong Kong and Seoul are the cities of the region with dominant command and control functions, and in 2011 together they made up 57% of Asia-Pacific's overall weight. Table 2 demonstrates that considering the weights of headquarter cities the largest growth – as has been mentioned above – was realized in Beijing and Hong Kong. Beside Chinese cities, Indian cities were also rising markedly, in particular Mumbai, Delhi, Kolkata and Hyderabad. At the same time, in parallel with the general increase of the weight of the region the capital cities (Kuala Lumpur, Bangkok, Manila and Jakarta) of the Southeast Asian economies were growing to varied extents.

Table 2: Top10 headquarter cities with positive change of weight, 2011/2006

Rank	City	Country	Change of weight 11-06
1	Beijing	China	12.23
2	Hong Kong	Hong Kong/China	2.46
3	Shanghai	China	1.85
4	Mumbai	India	1.40
5	Shenzhen	China	1.33
6	Delhi	India	0.45
7	Singapore	Singapore	0.42
8	Kuala Lumpur	Malaysia	0.41
9	Perth	Australia	0.35
10	Guangzhou	China	0.33

In contrast, the weights of Japanese cities were significantly shrinking, with just three cities showing any increase in the period under review (+0.17 in total), whereas 53 cities suffered some drop (-22.87 in total). Table 3 reflects that apart from the Japanese headquarter cities it was primarily the cities of Taiwan that lost some of their value in 2006, with the largest decrease occurring with the capital, Taipei City.

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Table 3: Top10 headquarter cities with negative change of weight, 2011/2006

Rank	City	Country	Change of weight 11-06
1	Tokyo	Japan	-14.56
2	Osaka	Japan	-3.20
3	Toyota	Japan	-1.47
4	Seoul	South Korea	-1.27
5	Taipei City	Taiwan	-0.66
6	Nagoya	Japan	-0.54
7	Kyoto	Japan	-0.35
8	Hsinchu City	Taiwan	-0.30
9	Kariya	Japan	-0.28
10	Hiroshima	Japan	-0.27

In 2006, the sector featuring the largest volume was Tokyo's financial sector, where 41 companies were operating, i.e. 7% of all the Forbes companies in Asia-Pacific (Table 4). The weight of this sector is well exemplified by the fact that its value was in itself larger than the aggregate weight of Seoul, which ranked second among the cities. Half of the ten sectors with the largest weights belonged to Tokyo in 2006. Half of the ten sectors with the largest weights belonged to Tokyo in 2006. Toyota was the only city that was able to enter the Top10 with only one company (Toyota Motor Corporation) in a single sector (Consumer Discretionary).

Table 4: Top10 headquarter cities with the largest weight in different GICS sectors, 2006/2011

Rank	City	Country	GICS sector	Weight 2006	City	Country	GICS sector	Weight 2011
1	Tokyo	Japan	Financials	12.88	Beijing	China	Financials	11.33
2	Tokyo	Japan	Industrials	8.25	Tokyo	Japan	Financials	8.07
3	Tokyo	Japan	Consumer Discretionary	4.24	Tokyo	Japan	Industrials	4.80
4	Beijing	China	Energy	2.97	Beijing	China	Energy	4.41
5	Tokyo	Japan	Materials	2.95	Sydney	Australia	Financials	2.75
6	Toyota	Japan	Consumer Discretionary	2.71	Hong Kong	Hong Kong/China	Financials	2.34
7	Tokyo	Japan	Information Technology	2.61	Hong Kong	Hong Kong/China	Industrials	2.30
8	Sydney	Australia	Financials	2.53	Tokyo	Japan	Consumer Discretionary	2.25
9	Seoul	South Korea	Financials	2.18	Seoul	South Korea	Financials	1.99
10	Beijing	China	Financials	2.14	Seoul	South Korea	Information Technology	1.94

By 2011, considerable changes had occurred: the weight of Tokyo's financial sector dropped by more than 30%, while the weight of its industrial sector, which still ranked second in 2006, decreased by 40%. In contrast, by 2011 Beijing's financial sector had risen to first place, which was primarily due to the outstanding performance of giant banks (Industrial and Commercial Bank of China – ICBC and China Construction Bank). The strengthening of China's financial sector is indicated by the fact that in 2011 – beside Beijing – Hong Kong's financial sector also entered the Top10. Beijing's energy sector was kept in fourth place by the rapid growth of two oil industry giants: the company with the fifth largest turnover in the world, the Sinopec and the third most valuable firm, the PetroChina.

Hong Kong succeeded in improving its positions, and entered the Top10 in two sectors (financial and industrial) at the same time. According to Sassen (1991, p. 174) Hong Kong could only lose its historic role if all investor interest in China would cease, or if Shanghai could replicate the combination of resources represented by Hong Kong. Both of these conditions are unlikely in the near future. On the basis of our analysis, this should be accepted as true (not only with regard to Hong Kong, but also to Beijing) in spite of the fact that according to Walcott and Pannell (2006, p. 200) Shanghai is China's largest and greatest commercial and industrial city.

4   DECLINING TOKYO AND RISING BEIJING?

The previous chapters have clearly shown that the major command and control centre of the Asia-Pacific region is still Tokyo, though with a diminishing weight, while Beijing has emerged as its most significant competitor. When looking at only changes in the weights of the two cities, it could be forecast that in the foreseeable future Beijing would come ahead of Tokyo, and rise to the level of New York and London in global economic control (in practice by taking over the role of Tokyo). However, when examining the structure of the various industrial sectors of the cities, the overall picture is much more complex, and the above assumption seems to be less well-grounded. From among the examined Asia-Pacific cities, Tokyo has the most well-balanced economic structure, it is only the Japanese capital, where all the 10 GICS sectors can be found (and beside Tokyo, even globally only New York, London and Paris belong to this group of cities). In contrast, the global companies concentrated in Beijing are involved just in eight sectors, and the Consumer Staples and Health Care sectors are in fact not present. Table 5 reflects that in the period from 2006 to 2011 the weights of all the sectors in Tokyo diminished, and the financial and industrial sectors primarily impacted by the economic crisis have lost the most. On the other hand, in Beijing only the Telecommunication Services sector suffered some minimum decrease, while in the other sectors various growth rates could be recorded. In the period under review, the most dynamically developing sector of the Chinese capital was Financials. The growth rate itself in 2006–2011 (+9.19) was larger than the absolute weight of the Financials sector in Tokyo in 2011; if in Beijing only this sector were present, then it would be the second most significant city in the Asia-Pacific region. If the examined trends do not change, meaning that the weights of Tokyo's sectors will further decrease, while the drastic increase in the weight of Beijing's Financials sector continues, then it can be suggested that the Chinese capital will become the leading command and control centre of the Asia-Pacific region in the foreseeable future.

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Table 5: Changes of Tokyo's and Beijing's aggregate weights in different GISC sectors, 2006/2011

GICS Sectors	Weight, Tokyo, 2006	Weight, Tokyo, 2011	Change of weight, Tokyo	Weight, Beijing, 2006	Weight, Beijing, 2011	Change of weight, Beijing
Consumer Discretionary	4.24	2.25	**-1.98**	0.00	0.05	**0.05**
Consumer Staples	2.10	1.36	**-0.73**	0.00	0.00	**0.00**
Energy	1.03	0.91	**-0.12**	2.97	4.41	**1.44**
Financials	12.88	8.07	**-4.81**	2.14	11.33	**9.19**
Health Care	0.79	0.70	**-0.09**	0.00	0.00	**0.00**
Industrials	8.25	4.80	**-3.44**	0.19	1.19	**1.00**
Information Technology	2.61	1.77	**-0.84**	0.00	0.17	**0.17**
Materials	2.95	1.27	**-1.68**	0.37	0.82	**0.45**
Telecommunications Services	1.87	1.43	**-0.45**	0.54	0.36	**-0.19**
Utilities	1.00	0.58	**-0.42**	0.23	0.37	**0.14**

At the same time, it is this very, relatively out-of-balance economic structure that threatens the regional and global position of Beijing the most. To the combined weight of the Chinese capital (raising the city to the second rank among the cities of the region), the Financials sector has a nearly 50% contribution, while in the case of Tokyo this rate is only 35%. In Beijing, the weight of the second-ranking Energy sector is only one-third of the weight of Financials, and its growth dynamics are even smaller, while in the other sectors they are in fact negligible, at least in comparison with the Financials (as it is shown in Table 5). In 2011, the Nobel Prize winner economist, Paul Krugman explained his opinion in The New York Times: today, China is walking the way similar to that of Japan in the late 1980s, or the United States in the middle of the 2000s, because one of the major sources of GDP growth is the overheated investment boom into the real estate sector (the volume of real estate investment has roughly doubled as a share of Chinese GDP since 2000). Nevertheless, a burst of the real estate bubble may easily lead to an economic crisis, which is clearly exemplified by Japan's lost decade or the financial crisis starting in 2007 from the United States and plunging the global economy into depression for years. Such a hypothetical financial crisis would cause serious damage to the Chinese banking system, primarily in its centre, Beijing. With its financial sector shaken (not to mention its impacts on the other sectors), the Chinese capital would indeed lose its currently dominant position in the region, undoubtedly leaving Tokyo alone at the helm.

5   CONSLUSION

When the command and control functions of the cities in the Asia-Pacific region are studied, a major process of rearrangement can be identified. The leading cities of Japan, especially Tokyo, Osaka and Nagoya, are continuously losing weight, whereas cities in China (Beijing, Hong Kong, Shanghai, Shenzhen and Guangzhou), India (Mumbai, Delhi and Kolkata) and Southeast Asia (Bangkok, Jakarta, Kuala Lumpur and Manila) are strengthening. Obviously, the studies conducted in recent years have never questioned this fact, but it is important to emphasize that in terms of control and command functions they do not simply experience relative growth. The major cities of the developing world are occupying leading economic control positions, and seizing the positions of traditional control and command centres, e.g. Tokyo, Seoul and Osaka.

All these changes are extremely important, and raise a question which is in no way purely theoretical: should we reconsider our well-grounded concept of the global city; can the formerly established order change? Naturally, opinions tend to diverge on this issue, for

instance Wu and Ma (2006, p. 192) argued: When the attention is shifted towards the ''frontier of globalization,'' where many cities in developing countries or newly industrializing economies are competing for global city status, the indicators of global functions such as the number of MNC headquarters become less important—because through understanding globalization as a process, what matters is the essence and scale of their transformation rather than their absolute status in the world city hierarchy. The question is not whether these cities are global cities – as obviously they are not when compared such cities as New York, London and Tokyo – in the sense of their status in the global urban hierarchy.

At the same time it should be emphasized – and it has been confirmed by our analysis – that in the Asia-Pacific region Tokyo's leading role in economic control is no longer unchallenged, because it has been approached by Beijing. The dynamic growth of the Chinese economy (in 2010, China became the world's second largest economy, right behind the United States) suggests that primarily Beijing, Hong Kong, Shanghai and Shenzhen will in the future acquire further command and control functions to strengthen their roles in economic control. Alvstam et al. (2009, p. 206) claims that Chinese companies have started to become more active on the international market, with interest in buying foreign competitors or potential technology partners, and this process fundamentally contributes to the regional and global strengthening of Chinese cities. The most spectacular example is the acquisition of IBM's personal computer business (ThinkPad) line in 2005 by Lenovo Group, or the takeover of Volvo Cars in 2010 by Zhejiang Geely Holding Group. These acquisitions are not unique examples – though are decidedly the most significant ones –, and according to The Wall Street Journal (2011) this process is accelerating in parallel with the financial crisis of the European Union. The economic crisis has made European companies targets for potential acquisition moves, and therefore in recent years Chinese companies have taken over control over more than 100 smaller and larger European companies (the Rhodium Group predicts Chinese companies will invest more than 1 trillion USD overseas between 2011 and 2020).

As the first step of this process, in 2012 the combined market value of the Forbes financial companies in the Chinese capital became the highest in the world, moving ahead of the relevant values of the companies in the traditional financial centres of New York, London and Tokyo.

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EMPIRICAL ANALYSIS OF SERBIAN INNOVATION POTENTIAL IN THE PERIOD 2009-2011

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ABSTRACT
In this paper, first a brief review has been made about the importance of innovation for economic growth and development. Then the positions and values of the global innovation index for the top 25 most innovative economies, Serbia and selected seven European countries from its surroundings for in the period 2009-2011 have been displayed. We studied the relationship between innovation output and innovation inputs, on the example of a selected group of countries, on one hand, and a selected group of countries in the European Union, through the box plot and correlation analysis.

Keywords: Innovation, Innovation efficiency, Innovation inputs, Innovation results

1 INTRODUCTION

A larger share of new products, services and processes is one of the key assumptions of generating economic growth and improving competitiveness of the country, regardless of the level of its economic development. Growth in innovation potential, on the one hand and improving its competitiveness, on the other hand, is the long term requirement for economic and social progress of all countries regardless of the level of economic development. (Cvetanović, Mladenović and Nikolić, 2011)

Score of the achieved level of innovation and competitiveness of countries is based on a larger number of data. This study used data from the Global Innovation Index Report 2011 - 2012 and Global Competitiveness Index Report 2012-2013. We analyzed data on innovation and competitive performance of Serbia and selected group of seven countries in its immediate surroundings.

The interest of economic theory for understanding the importance of innovation in generating economic growth, has been present in continuity from the sixties of the previous century and promotion of neoclassical growth model of Robert Solow, up until the present day. (Solow, 1956, 1957) It has increasingly being considered that differences in the innovation of the economy are a key reason for the manifestation of the differences in economic performance of national economies.(Link and Siegel, 2003) The articulation of this view in economics is particularly contributed to the emergence of new (endogenous) growth theory in late ninth and early tenth decade of the twentieth century (Romer, 1986, 1987, 1990).

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In this paper, innovativeness of the economy is quantified based on data from Global Innovation Index (The Global Innovation Index, Geneva, 2012).

Global Innovation Index is based on two sub-indices: Innovation inputs and Innovation outputs.

Innovation inputs consist of five columns that display elements, ie. potentials for innovative activities of national economy: (1) Institutions, (2) Human capacity, (3) Infrastructure (4) Market sophistication, and (5) Business sophistication.

Innovation outputs consist of two columns that show the actual results of innovation: (6) Scientific outputs and (7) Creative outputs. Each column is divided into sub columns and each sub-column consists of individual indicators.

Using the model shown in Figure 1, the country will be measured in accordance with their Innovation inputs and outputs, which together determine the overall value of GII and place the country on a ranking list made under the criteria of innovation.
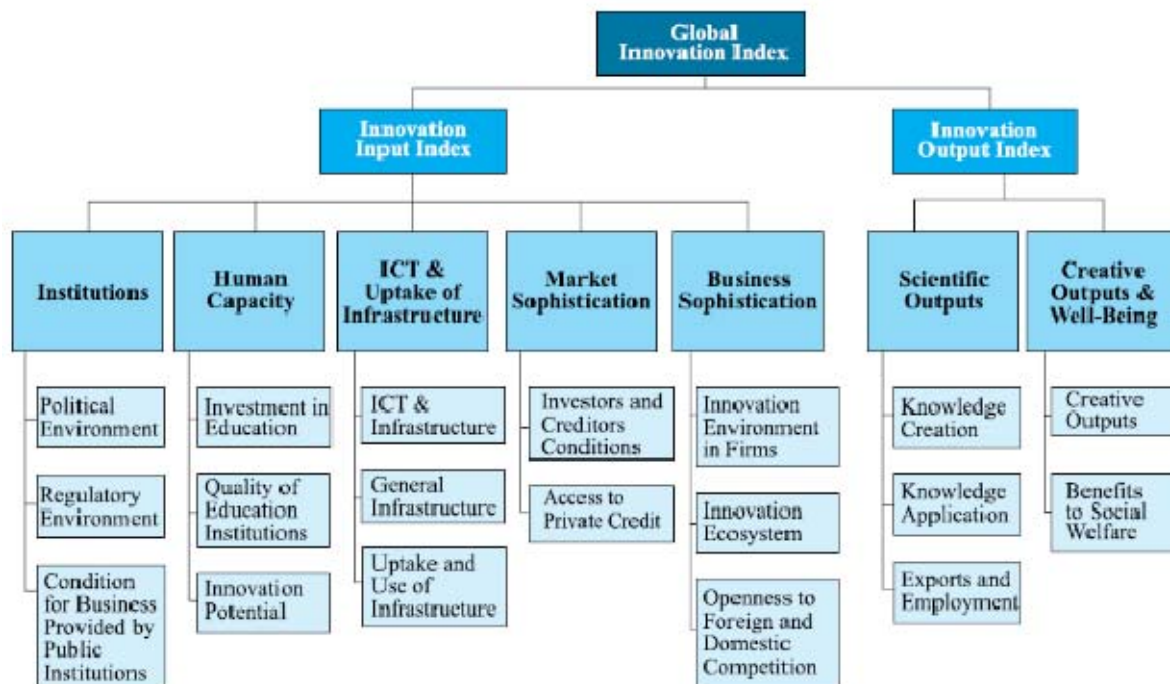
*Figure 1: Metrics of Global Innovation Index (The Global Innovation Index 2011,
Accelerating Growth and Development, INSEAD)*

2   INNOVATION LEADERS, SERBIA AND NEIGHBORING COUNTRIES
Table 1 shows the position and value of the top 25 most innovative economies of the world in the period 2009–2011.

Table 1: Rankings of top 25 most innovative economies in the world (The Global Innovation Index 2011, Accelerating Growth and Development, INSEAD)

Economy	Value (0-100)	Rank in 2011	2010	2009
Switzerland	63.82	1	4	7
Sweden	62.12	2	2	3
Singapore	59.64	3	7	5
Hong-Kong	58.80	4	3	12
Finland	57.50	5	6	13
Denmark	56.96	6	5	8
USA	56.57	7	11	1
Canada	56.33	8	12	11
Netherlands	56.31	9	8	10
Great Britain	55.96	10	14	4
Iceland	55.10	11	1.	20
Germany	54.89	12	16	2
Ireland	54.10	13	19	21
Israel	54.03	14	23	23
New Zealand	53.79	15	9	27
Korea	53.68	16	20	6
Luxembourg	52.65	17	15	17
Norway	52.60	18	10	14
Austria	50.75	19	21	15
Japan	50.32	20	13	9
Australia	49.85	21	18	22
France	49.25	22	22	19
Estonia	49.18	23	29	29
Belgium	49.05	24	17	18
Hungary	48.12	25	36	47

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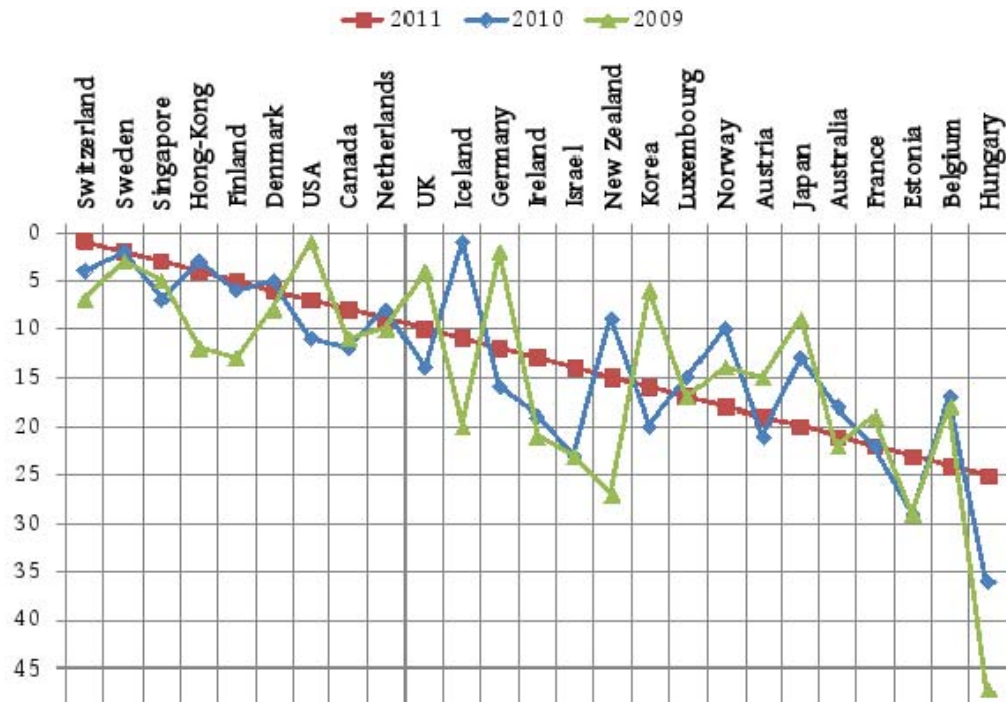
Figure 2: Rankings of the top 25 most innovative economies in the world

Table 2 shows the position and the value of the Global Innovation Index for Serbia and the group of selected countries in Europe in the period 2009–2011.

Table 2: Rankings of Serbia and selected countries (The Global Innovation Index 2011, Accelerating Growth and Development, INSEAD)

Country	Value (0-100)	Rank in 2011	2010	2009
Hungary	48.12	25	36	47
Slovenia	45.07	30	26	36
Bulgaria	38.42	42	49	74
Poland	38.02	43	47	56
Croatia	37.98	44	45	62
Romania	36.83	50	52	69
Serbia	36.31	55	101	92
Greece	34.18	63	46	54
Macedonia	33.47	67	77	89
Georgia	31.87	73	84	98
Bosnia and Herzegovina	30.84	76	116	n / a
Albania	30.45	80	81	121

There has been a major qualitative shift for Serbia in the criterion of Global Innovation Index in 2011 compared to previous years. In fact, from 101st place in 2010 Serbia ranked according to this criterion on the 55th place in 2011, surpassing Greece, a long-time member of the European Union. However, even under the condition that there is no doubt about the statistics incompatibility in the data on the basis of which the Global Innovation Index is composed, the fact is that countries from the surrounding, Hungary, Croatia, Romania are significantly ahead of Serbia according to the criterion of Global Innovation Index in 2011.

From the countries bordering Serbia only as Bosnia and Herzegovina and Macedonia are behind it in the Global Innovation Index. (Cvetanović, Despotović and Nedić, 2012.)

The question timely arises as to what extent innovation input size determines the value of innovation output. Depending on the answer to such a question we can provide useful information to policymakers in which direction is most appropriate to work on incentives and other government measures to improve innovation of the economy. In order to get the answer to the question of dependencies in values that make innovation inputs and innovation output components, we will use the statistical analysis of a very well known, so called XY diagram. This is a common way to show the connection (direction and degree of quantitative variation agreement) between two variables.

Figure 3, shows the scatter diagram of the relationship between the variables of Innovation inputs and outputs.
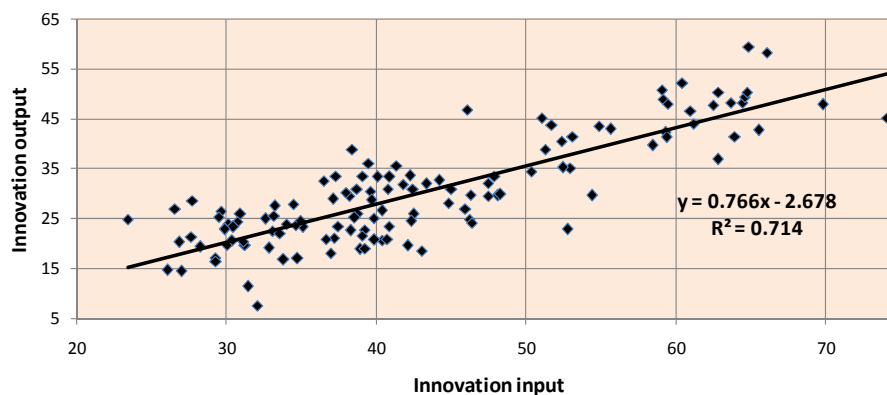
Figure 3: Diagram of dispersion of the link between innovation inputs and outputs (data on a sample of 125 countries)

A graphical representation of data pairs innovation inputs and innovation outputs shows a strong correlation between the variation of the observed variables. Customizing the linear form of interdependence and analysis of components in the specified model{/0} also suggests{/0} {/0} previously stated, perceived visual{/0} statement.{/0} In fact, linear regression function has the following form: y = - 2.678 + 0.766 X, with statistics of R 2 = 0.714 and R = 0.845.The value of the coefficient of determination indicates the presence of 71.4% variation in variable innovation output is explained by variations in innovation inputs, while the remaining 28.6% is a result of the influence of other factors not included in this model. Strong correlation is confirmed by the correlation coefficient 0.845. Testing the hypothesis of linear interdependence of variables over the corresponding regression coefficient obtains the value of the test statistics at 17.527. With probability 0.05 level of significance of the test and the test threshold at 1.9794, we also conclude that there is a statistically significant linear correlation between the variables of innovation inputs and innovation outputs.

Figure 4 scatter diagram shows the relationship between the variables of Global Innovation Index and Innovation Efficiency Index.

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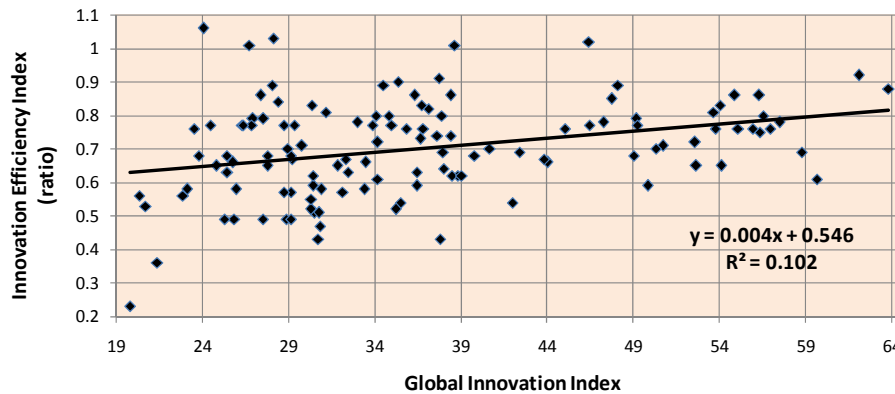
Figure 4: Scatter diagram for the relationship of Global Innovation Index and Innovation efficiency index

A graphical representation of data pairs for the Global Innovation Index and Innovation Efficiency Index shows a very weak correlation between the variations of the observed variables. Customizing the linear form of interdependence and analysis of components in the specified model also suggests previously stated, perceived visual statement. In fact, linear regression function has the following form: y = 0.546 +0.004 X, with statistics of R 2 = 0.102 and R = 0.319. The value of the coefficient of determination indicates that only 10.2% of the variation in variable Innovation efficiency index is explained by variations of the Global Innovation Index, while the remaining 89.8% is a result of the influence of other factors not included in this model. Weak correlation is confirmed by the correlation coefficient 0.319. Testing the hypothesis of linear interdependence of variables through appropriate regression coefficient obtains value of the test statistics at 3.237. With probability level of significance of the test at 0.05 and the test threshold at 1.9794, we also conclude that there is a statistically significant linear correlation between the variables Global Innovation Index and Innovation Efficiency Index.

3   CLUSTER ANALYSIS

By cluster analysis, the observed set of elements is divided into subsets, so that in the same cluster we group the elements that are similar in some sense. In this case the method used was agglomerative hierarchical clustering.

Figure 5 shows the cluster analysis conducted between clusters for which we used data for the Global Innovation Index, innovation index of efficiency, input and output sub-index with the corresponding columns of The Global Innovation Index 2011-2012. X axis gives the diversity level between the countries analyzed.

Challenges of the Modern World - Contemporary Economy and Globalization
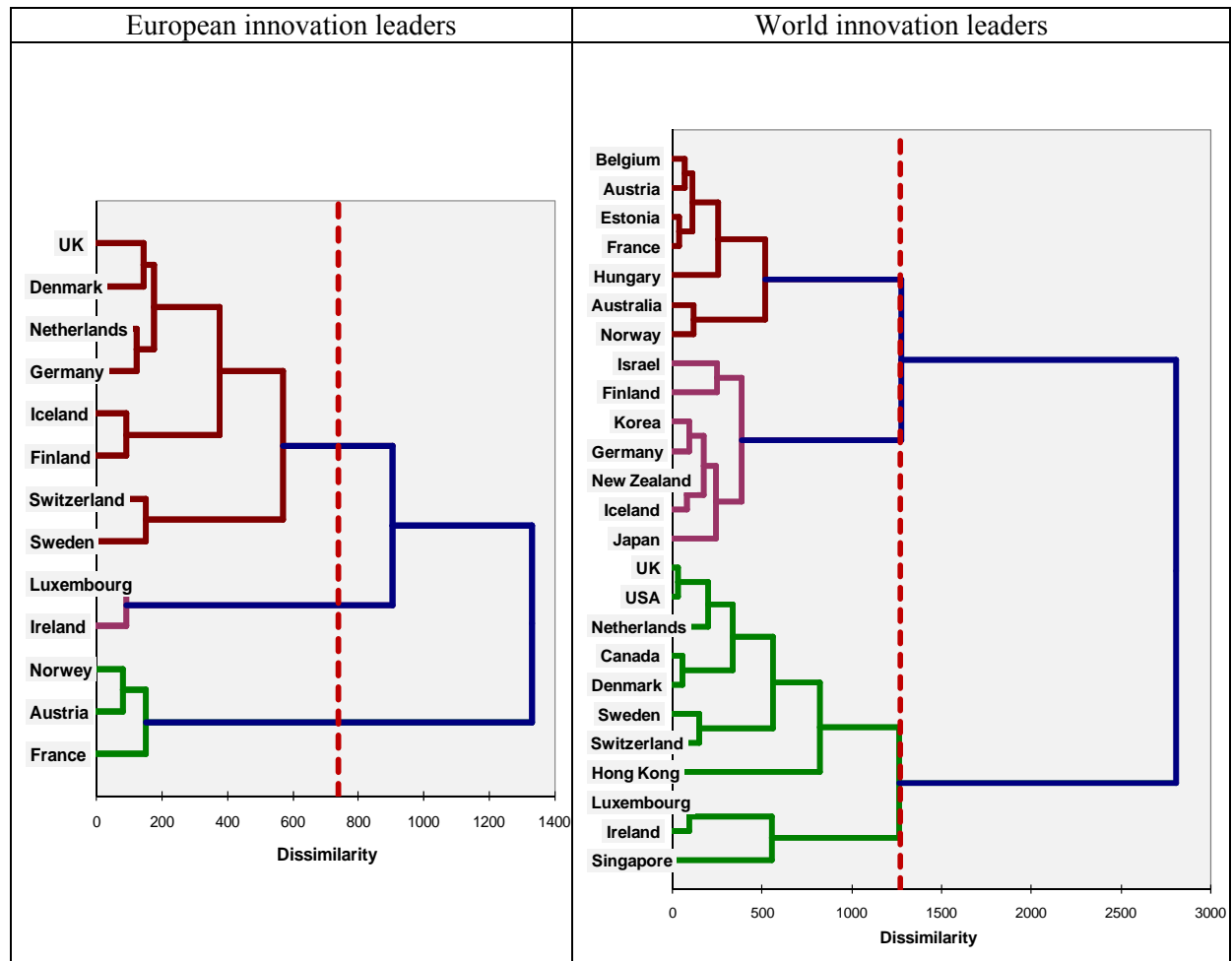
Figure 5: The dendrogram of the cluster analysis conducted for the European and global innovation leaders

In the process of grouping selected European innovation leaders according to the degree of efficiency innovative bottom-up agglomerative hierarchical clustering method was used. In the initial step, each country is treated as a separate cluster. Their merging in pairs of clusters is based on the similarity in terms of the observed values of the variables which is the result of all subsequent clustering iterations until all observed entities are consolidated within one cluster. If we take diversity level of 600 as a possible cross-section in dendrogram, three clusters of the observed countries are clearly identified. The largest group consists of 8 countries, or 53% of the total number of observed countries. The second group includes Norway, Austria and France. The third group relates to Luxembourg and Ireland.

If we consider the world's innovation leader and take the cross section at diversity level of 1250, it is possible to clearly identify two dominant clusters in the presented dendrogram. A striking feature of the first cluster is that its two sub cluster elements are created at a much higher level of diversity than is the case with countries that belong to another cluster. The countries included in the cluster are characterized by a much higher degree of variations in level of innovation effectiveness than is the case with countries within the other cluster. Also, in comparison with clusters that are formed for European leaders, the grouping for the world's

leaders in clearly segregated clusters was achieved at a much higher level of diversity, which suggests the expressive degree of variability in the innovative effectiveness worldwide.

Figure 6 shows the dendrogram of the cluster analysis implemented for Serbia and selected group of 11 European countries, the diversity is given on the Y axis.
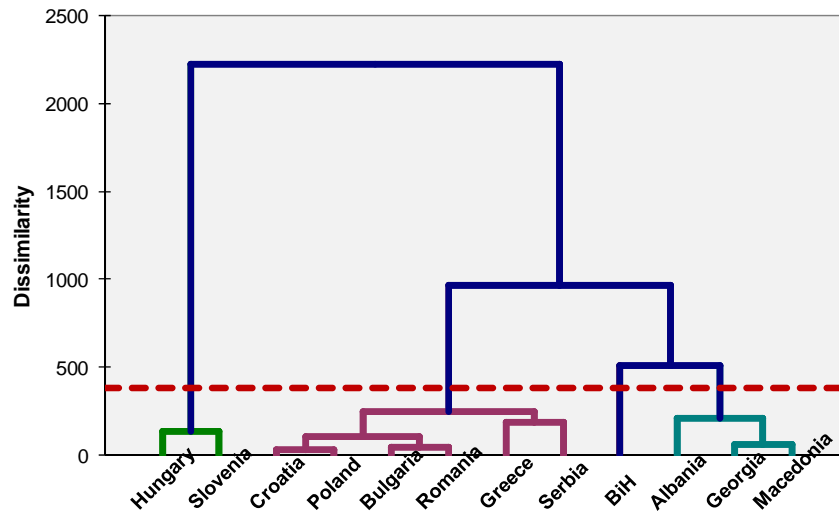
Figure 6: The dendrogram of the cluster analysis implemented for Serbia and selected group of countries

Cluster analysis applied to Serbia and a selected group of countries follows a similar trend for grouping as countries in the category of European innovation leaders. On the dendrogram presented, it can be seen that from the innovative aspect of the degree of efficiency, at the first level of grouping, Serbia is most similar to Greece and then to Croatia, Poland, Bulgaria and Romania. On the other hand, there is the biggest difference compared to Hungary and Slovenia. Overall, at the diversity level of 900 we can identify two clusters, i.e. Hungary and Slovenia on one side against all other countries covered by the analysis.

4 COMPARATIVE ANALYSIS OF INNOVATION FOR SERBIA AND NEIGHBORING COUNTRIES IN 2011

Table 3 gives the value of key innovation performances of Serbia and selected group of countries in 2011.

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Table 3: Key innovation performances of Serbia and selected group of countries in 2011(The Global Innovation Index 2011, Accelerating Growth and Development, INSEAD)

	GII	Innovation efficiency index	Innovation Inputs Index	Innovation Output Index
Albania	30.45	0.59	38.29	22.62
Bosnia and Herzegovina	30.84	0.47	42.10	19:58
Bulgaria	38.42	0.74	44.20	32.64
Croatia	37.98	0.69	45.00	30.96
Grece	34.18	0.61	42.48	25.89
Macedonia	33.47	0.66	40.37	26.57
Romania	36.83	0.76	41.80	31.86
Serbia	36.31	0.86	39.09	33.53
Average	34.81		41.67	27.96
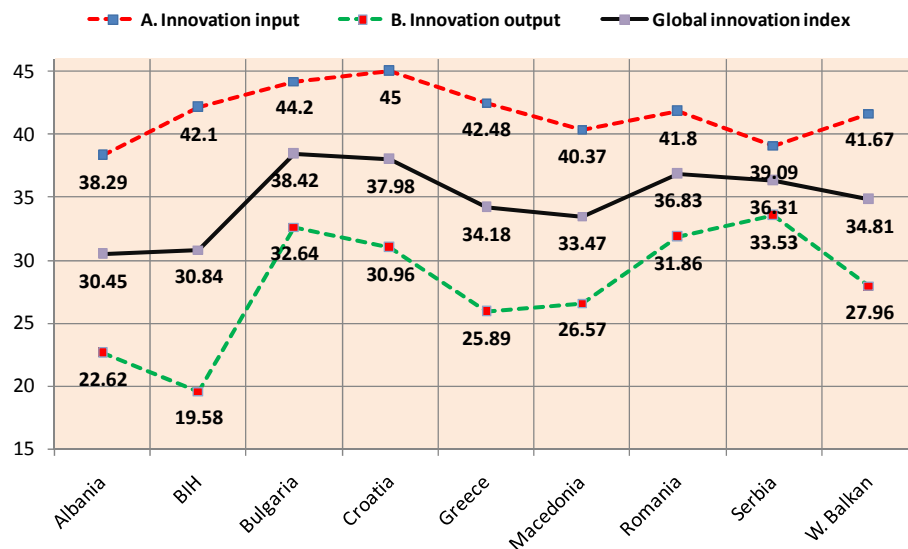
Figure 7: Innovation Inputs Index and Global Innovation Index, Serbia and neighbours

On the figure in given diagrams, we analyzed Serbia's position in relation to the surrounding by sub columns of innovation inputs.

A representation of data pairs of variables Innovation input and innovation output of selected countries, shows a very weak correlation between the variation of the observed variables. Customizing the linear form of interdependence and analysis of components in the specified model also suggests previously stated, perceived visual statement. In fact, linear regression function has the following form: y = 3.315 +0.591 * X, with statistics of R 2 = 0.073 and R = 0.27.The value of the coefficient of determination indicates that only 7.3% of the variation in Innovation output variable is explained by the variations in Innovation input variable, while the remaining 92.7% is a result of the influence of other factors not included in this model. Weak correlation is confirmed by the correlation coefficient 0.27. Its value indicates the existence of low grade direct (straight line extending from the lower left to the upper right corner of the graph), linear correlation between the observed variables in the countries included in the sample. The slope of the line (b 1 = 0.591) indicates that an increase in

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innovation inputs of one unit of measurement leads to an increase in innovation output of 0.591 (corresponding to the units of measurement used to express the innovation output variable).Testing the hypothesis of linear interdependence of variables over the corresponding regression coefficient obtains the value of the test statistics at 0.688. With a probability level of significance of the test 0.05 and 2.4469 test threshold it is also concluded that there was no statistically significant linear correlation between the observed variables - Innovation input and Innovation output.

In order to obtain a more realistic picture of the correlation between innovation inputs and outputs we will investigate the correlation.

Table 4: Innovation Inputs Index and Innovation Output Index of selected countries of the European Union in 2011 (The Global Innovation Index 2011, Accelerating Growth and Development, INSEAD)

	Innovation Input	**Innovation output**
Austria	5.00	3.42
Belgium	4.95	3.68
Cyprus	4.37	2.84
Denmark	5.46	3.99
Estonia	4.71	2.81
Finland	5.42	3.90
France	4.94	3.45
Germany	5.09	3.56
Ireland	4.95	3.59
Luxembourg	4.70	4.06
Slovenia	4.52	3.07
Sweden	5.54	4.16
UK	5.17	3.68
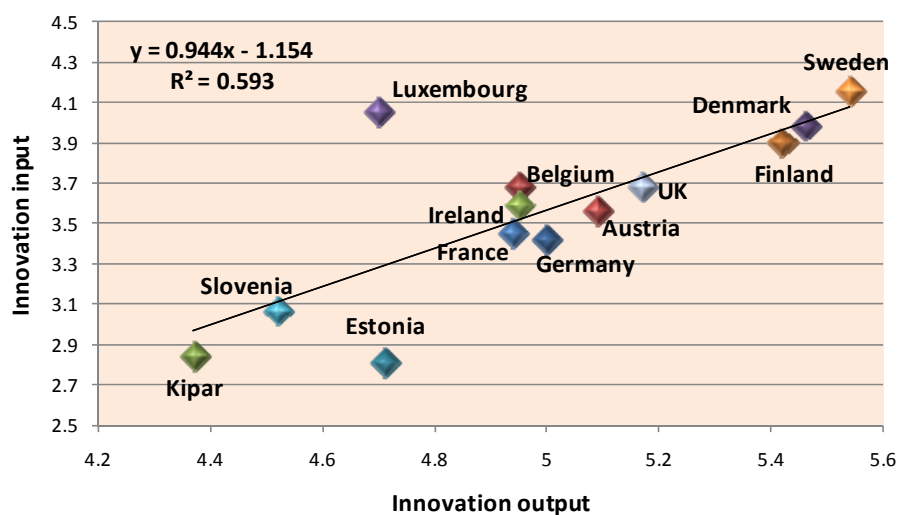
Figure 8: Scatter diagram for the connection between global innovation index and innovation efficiency (data on a sample of thirteen EU countries)

Empirical data X (innovation input) and Y (innovation output) is adapted to linear form of dependencies. By gaining a linear regression function which has the form   with stats and R =

0.770.The value of the coefficient of determination indicates that 59.3% of the variations in Y is explained by variations in X, and interpreted in the presented regression model. The rest 40.7% of the variation is the result of the effects of other factors. Correlation coefficient 0.770 indicates that there is a strong direct linear relationship between X and Y. Testing the hypothesis of linear interdependence of variables through appropriate regression coefficient obtains value of the test statistics at 4.266.With a probability level of significance of the test at 0.05 and 2.2010 test threshold , it is concluded that there is a statistically significant linear correlation between X and Y. Thus, given the values obtained with the proposed model, it can be concluded that the model is valid for statistical inference, and implementation of correct predictions and projections of Y.

5   CONSLUSION
Serbia and surrounding countries have innovation performance quality at a much lower level compared to other EU countries. One of the reasons for delayed transition of Serbian economy is its low innovativeness.

In considering the relationship between Innovation Input and Innovation Output Index for Serbia and a select group of countries, it was found that there was no statistically significant effect of innovation input on innovation results.

Considering the relationship between Innovation Input Index and Innovation Output Index for reference European countries revealed a very strong direct linear correlation, and statistically important impact (linear correlation) of inputs to innovation results.

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THE EFFECT OF THE EARLY ENTRANCE TO JOB MARKET ON THE HEALTH STATUS OF THE BRAZILIANS IN 2008

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ABSTRACT
The early entrance to the job market has, among other consequences, a negative effect on the health status of the individual. In 2008, nearly a sixth of the Brazilian population claimed to have started working before the age of 10 and over a third reported to have started working between 10 and 15 years old. This paper aims to investigate the effect of early entrance to the job market on the current health status of the individual. The database provided by the National Survey by Household Sampling (PNAD) for 2008 was used to reach the objective of this paper. The analysis was conducted at national and regional extent using Ordered Logit method. It was evident that delaying entrance to the job market impacts positively on the current state of health. Moreover, it was found that the educational level and personal income increase the likelihood of the individual presenting a better state of health. Distinct effects of these variables on health status were also found when we took into account the regional context. The Southeast and South showed the most severe impacts of child labor on health, as well as the best results in terms of the impact of education and personal income on health status. In contrast, the North and Northeast regions showed the greatest gender disparities related to health status.

Keywords: Brazil, Child labor, Health status, Ordered logit

1   INTRODUCTION

According to the International Labor Organization (OIT, 2012), 215 million children work at present, of which about 50% act in derogatory activities. The early entrance of the child to the labor market coerced either by the family or not, prevents them from attending school or, even, from receiving some kind of care (OIT, 2012). Child labor ravages all the continents, including the European one. In Latin America, a few studies which investigate the causes of child labor as well as its consequences, mainly for Brazil, are highlighted.

In Brazil, in 2008, 13 % of the population admitted to have begun to work before the 10 years old, which makes worrying the impact of child labor upon the future of those children and consequently upon the process of the economic development of the country (IBGE, 2008). In this sense, Kassouf et al. (2001) and Nicolella et al. (2008) claim that child labor inhibits the development of the child and, afterwards, of the grown-up individual, owing to, among other consequences, the impossibility of attending school. For Vietnam, for instance, Beegle et al. (2009) have found evidence that child labor negatively impacts on school performance.

Although, a great part of the works does not stress the effect of the early entrance to the job market upon health, the different ages in which a child goes into the job market possess distinct impacts on the health status of the adult person. In other words, it is expected that children who began to work before the 10 years old are more harmed in relation to the ones who enter between 10 and 15 years, for example. In Brazil, in 2008, 39% of the population admitted to have gone into the job market between 10 and 15 years old (IBGE, 2008).

The regional matter is also very important in the surveying of the relationship between child labor and health status, since in regions, as the Brazilian Northeast, the percent of individuals who claimed to have entered the job market before the 10 years old is of 16% (IBGE, 2008). In the Central-Western region, about 15% of the population claimed to have begun in the job market before the 10 years, while in the Southeast region, more developed economically– mainly as far as the industry is concerned – about 10% so stated. In the other regions, North and South, that percent is intermediary, respectively, 13% and 14%. It is advisable to highlight that other factors are also unequal, such as education, income and race and gender question.

Therefore, given that context, the present work intends to investigate the relationship between the individual's age of entrance to the job market and his current health status. Strictly speaking, it aims to survey from the construction of age ranges the effect of the delay upon the age of entrance to the job market on the health status.

In addition to that piece of information, this work counts, forthwith, with the literature review which is concerned with this theme. Afterwards, both the methodology and the main results obtained are presented. At last, the final remarks are presented.

2 GENERAL OVERVIEW OF THE LITERATURE ABOUT THE IMPACT OF CHILD LABOR ON HEALTH STATUS.

The literature which is concerned with the theme, although scarce, enables us to characterize in a concrete form, the research theme. Some works stand out for the theoretical discussion and others for the empirical application.

The investigation about the health status of the grown-up individual or even of the child is not recent[1], though; its association with child labor is so. A few pioneering works made use of theoretical models to estimate the health demand. Grossman (1972, 1975) and Wagstaff (1986, 1993) stood out for their pioneering activity in the construction and debate of such models. In Brazil, recently, Oliveira and Gonçalves (2012) investigated, specifically, the health demand from models for countable data in which the variable to be explained was the number of consultations. Although, the theoretical model aims to survey the health status, does not embrace the effect of the early entry in the job market, central aim of the study.

Some studies prioritize to identify the impact of child labor upon other variables such as personal performance. Among those works, the ones proposed by Kassouf and Santos (2010) stand out, who investigate the impact of child labor upon the future performances of the Brazilians and by Haas et al. (2011), who seeks to investigate[2] the impact of the child's health on the performances of the same ones when they become adults (between 25 and 50 years) for

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[1] For a short literature review about the theme, see Dorman (2008).

[2] The data utilized were obtained from different sources, as *Social Security Administration*.

the 1990's. Furthermore, Fonseca (2011) turns his attention to the theoretical aspects of the relationship between health and employment.

In the international literature, there are two works which discuss the research trouble investigated in this work for Vietnam – O'Donnell et al. (2005) and Beegle et al. (2009). The first work is intended to investigate the impact of child labor on the health status in the short and long term, controlling for other control variables as education. The authors utilized the *Vietnam Living Standards Survey* to perform their surveys. Among the methods used; the Two Stage Least Squares (2SLS), the *Seemingly Unrelated Regression* (SUR) and Bivariate *Probit* stand out. O'Donnell et al. (2005) measured the health from the following variables: in the short term, body mass index; and, in the long term, recurrent diseases. The authors highlighted a weak relationship, in the short term, between the child labor and health, found when utilizing the 2SLS method in differences and robust in the long term.

Beegle et al. (2009), on the other hand, making use of the same data base, found no negative evidence of child labor upon the health status. Health was measured in two manners, diseases and number of sick days and in none of them, the negative effect upon the child labor was found.

Giuffrida et al. (2005) sought to investigate the correlation between poverty and health in Brazil as well as the relationship between health and child labor. In addition, the authors surveyed the determinants of the access and utilization of the medical assistance as well of the income. The authors made use of the data base of the Brazilian Institute of Geography and Statistics (IBGE), National Household Survey (PNAD) of the year of 1998 and innovated as regards the other works for using a distinct methodology – *Structural Equation Models – SEM*.

In the results found by Giuffrida et al. (2005), the positive impact of education, of income, of the public availability of water and of the presence of sewerage in the home on the health status. The authors also found that there is a positive relationship between dwelling the urban area and utilization of the medical assistance. Giuffrida et al. (2005) complemented the survey in stating that this result is in accordance with the literature and agree with the expected one, for in the urban areas there is increased possibility of access, since the availability is greater. Child labor, on the other hand, negatively influenced health status, as expected.

Kassouf et al. (2001) investigated the impact of the entrance of children to the job market on the health status when adult in Brazil. The authors utilized the data of the IBGE Standard of Living Survey of 1996–1997. Among the chief results, one can highlight that the early entrance to job market is associated with poor levels of schooling and income. In addition, the percent of individuals who possess an inadequate health status is directly associated with the ones who began to work before the 15 years of age. Besides, they call the attention to the fact that the impact of the early entrance to the job market may not be realized when the children become youngsters or young adults, but in reality, afterwards.

Nicolella et al. (2008) address that point in investigating the impact of child labor upon the health of the children in the farm sector. This work stands out in relation to the others for making use of the cohort techniques to join together these two data bases of the PNAD of IBGE - of 1998 and 2003. In short, the authors aimed to identify the children who were in the age range of 5 to15 years in 1998 and of 10 to 20 years in 2003.

The work by Nicolella et al. (2008) proposes to correct the endogeneity problem existing among the variables health status and if the child worked in the farm sector. For that purpose, the authors made use of the *Probit* method with instrumental variables and found that the sector in which the child works does not possess significant impact upon his health status, but, when surveyed the children of the urban area, child labor decreased the probability for them to present a very good health status by 0.128 percent point.

In short, the international literature, mainly as far as Brazil is concerned, is still incipient, with few studies with the purpose of relating child labor with health. Therefore, this work seeks to add to that literature the discussion between the early entrance to job market and the current health of the grown-up.

3   METHODOLOGICAL ASPECTS

The problem of research here suggested – effect of the entrance of children to job market upon the current health status – requires the use of methods which consider the binary or categorical dependent variable, since health status is hierarchized from very bad to very good[3]. Therefore, the method which best fits this sort of variable, utilized in this work, Ordered *Logit*.

Cameron and Trivedi (2005) present that method for a model ordered with m alternatives. The same one is estimated by the Maximum Likelihood, in which the log of the function of likelihood is given by:

$$\ln L = \sum_{j=0}^{m} \sum_{y=i} \ln\left[F\left(\alpha_j - x_i^{'}\beta\right) - F\left(\alpha_{j-1} - x_i^{'}\beta\right)\right]$$

It is proper to stand out that though if one surveys the signs of the coefficients, the association among the variables is given by the estimative of the marginal effects which indicate the effect of a given regressor upon the regress and the calculation of the marginal effects is given by:

$$\frac{\partial \Pr\left(y_i = j\right)}{\partial x_i} = \left[F''\left(\alpha_j - x_i^{'}\beta\right) - F'\left(\alpha_{j-1} - x_i^{'}\beta\right)\right]\beta$$

The Ordered *Logit* seeks to estimate the probabilities related with the greatest category, in this case, the fifth, referent to the health status very good. Furthermore, it was intended to verify the statistical significance of the variables separately as well jointly.

3.1   Variables

The data utilized in this work are coming from PNAD for the year of 2008. It was chosen to utilize the year of 2008 for presenting, in a direct form, in the questionnaire, a question about the individual's health status. It is worth highlighting that such a report is done by the individual interviewed, which can generate measure problems, given the subjective character of the question and/or of the answer.

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[3] The categorizing is given by: (1) very bad, (2) bad, (3) regular, (4) good and (5) very good.

The dependent variable – health status– is reported in five categories: very bad, bad, regular, good and very good. Since the method utilized is the Ordered *Logit*, the original categories were kept. The early entrance to the job market was measured from the creation of age ranges which point to the age in which the individual began to work. Two variables with distinct age ranges with the objective of captivate the unique impact upon the health status were constructed.

The first range consists in the age range between 4 and 9 years, while the second is concerned with the age range between 10 and 15 years. Although, one expects that both affect negatively the individual's health status, it is presupposed that the first age range degrades more health than the second one, since the chances for the child to study and develop professionally in the future decrease. The effect of that variable called, in most times, child labor, is confirmed by the literature as seen previously.

The variables selected for the survey of the determination of the health status were observed in papers with similar objectives. The previous section presents, in a short manner, those papers. However, it is noteworthy that Giuffrida et al. (2005) point to the relevance of surveying the association between health and age, education, race, among other factors. And, complementarily, O'Donnell et al. (2005) point to the gender as a determining factor in the resulting level of health. In addition to those variables, it was sought to capture other important effects such as the area in which the individual lives: rural or urban.

With the objective of measuring the impact of the age upon the health status, it was chosen for inserting a variable *age* into the model, corresponding to the current age of the individual. Age possesses a significant and negative impact upon health status, mainly, when the individual is at advanced age. That probably results from the possibility of occurring chronic diseases.

Nicolella et al. (2008), as already seen, discuss the health status, as a manner of accumulating human capital. The authors argue that the fact of a child not to work raises the probability that she possesses a more promising future, with higher levels of schooling and consequently of income. Starting from that presupposed, inserting more two control variables was chosen: years of study and personal income. The first one was constructed from the variable made available by the PNAD, *years of study*, and it is expected that it has a positive impact upon the health status. The second one was collected in the same source and as well as the previous one, a positive impact is expected.

In fact, the relationship of the variables years of study and *personal income* with the *health status* is founded on the same foundations. That means that both the variables are correlated so that the greater the level of income more years of study possess the integrants of the home and vice-versa. It is expected that a higher level of income enables a more adequate feeding, greater access to medical and hospital services and a greater level of schooling. Besides, education also raises the income. So, it is expected that a higher level of income as well as of schooling has as a consequence better levels of health. It is realized, in that way, that there is a relationship of endogeneity between the level of income and schooling, but it is supposed that this relationship does not affect the estimates.

At last, dummies variables which represent the gender, race and the fact of an individual being or not in the urban area, were inserted. The objective in that case is controlling possible

problems of omission of variables. The variable of gender takes over the value equal to 1 when is of the male gender. It is expected that being of the male gender has a positive impact upon the level of health, given the positive association with higher levels of income and consequently better levels of health.

The variable race takes over the value equal to 1 when the individual is black and has as an objective to captivate indirectly the racial differentiation in the income and educational level which impact on the individual's health status. Negative association between being a black and the health status is expected, since, in a lot of works, the racial prejudice is stressed.

The variable *urban* takes over value equal to 1 for individuals situated in the urban area. The objective is captivate the different health statuses prevailing between the urban and rural areas, grounded on a number of aspects, such as the health service offer as well as the income and schooling levels.

With the purpose of captivate different bias and not only intercept, or in other words, distinct impacts of the explicative variables about the individual's health status, estimating the following function (relationship) per region as well as at the national level was opted for:

$$health\_status = f(child, age, education, sex, race, urban, income)$$

in which health status is concerned with the categorical variable (ordered logit model), child is represented by two variables – age ranges, age represents the current age of the individual, *education* represents the amount of years of study, *gender*, a *dummy* with value equal to 1 for man, race, also d*ummy* with value equal to 1 for black, *urban, dummy* with value equal to 1 for individuals who dwell in the urban area and income, represented by the napierian logarithm of personal income.

4   RESULTS AND DISCUSSION

The model was estimated both at the nationwide and regional level, since the number of observations is high, which characterizes a good representation of the sample. It is stressed that it was chose to consider a complex sample. The econometric[4] model presented a good adjustment[5], as can be observed in the coherence of the estimated coefficients. The tests indicated that the variable health status is liable to be subdivided into five categories. In addition, the comparison among the probabilities estimated for each category and the percents of them in the samples enables to survey the model's adjustment. In general, the difference between these was inferior to 0.02 (or 2%), indicating, therefore, a good adjustment. The results found are corroborated by the literature. The evidence stands out that the early entrance to job market affects both negatively and significantly the health status of the grown-up. Kassouf et al. (2001) also found that relationship for Brazil. Beegle et al. (2009) did not find that statistically significant relationship, while O'Donnell et al. (2005) found a negative and significant relationship between child labor and health. The other results, when surveyed by the literature, also presented similar relationships, although distinct magnitudes.

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[4] It was no presented in the work, but for references, please send an e-mail: fsilva.f@hotmail.com.

[5] One sought to consider the problem of endogeneity by estimating a *Probit* with instrumental variables, but, the results were very similar, except some signs for some regions.

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The range of the effect of the variables upon the health status is measured from the calculation of the marginal effects. Those effects, presented in Table 1, in general, were similar among the regions. It was found that the rise in one year of age decreased by 0.5 percent point (*p.p.*) the probability for the individual to present very good health status. The impact of the age upon the health status attenuates in the Southeast and South regions, pointing out that the older people present greater probability of showing a worse health status. Giuffrida et al. (2005) found, overall, a depreciation of health with age, but, indicating that the magnitude of that effect ranges with the gender, its being more perverse for the female.

The division into age ranges in which the individuals began to work presented robust results, such an impact being both significant and distinct. Such a survey enables us to infer that for all the geographical regions and for the country as a whole, the insertion in job market before the 10 years of age presents more severe effect on the health status than the entrance between the 10 and the 14 years of age. For Brazil, the entrance to job market before the 10 years of age decreases by 4.8 p.p. the chances for the individual, in 2008, to present a very good health status. But the entrance between 10 and 14 years of age decreases by 1.7 p.p. such chances.

Regionally, it is realized that the South and Southeast regions stand out for superior effects of the early entrance to job market on the health status. Specifically, for the Southeast region, the entrance to job market under 10 years of age decreases the chances for the individual to present a very good health status by 5.2 p.p., while the entrance between 10 and 14 years of age decreases by 2.2 p.p. such a probability.

As far as the early entrance in the job market is concerned, in general, the results confirmed those found by Nicolella et al. (2008) and Kassouf et al. (2001). More severe impacts in the South and Southeast with relation to the North and Northeast and Northeast were highlighted. Partially, such an effect is due to the percent of persons who declared to have at least good health. For the first two regions, that percent is superior to 77% of the sample, while for the two latter regions, such a percent is inferior. It is worth pointing out that, methodologically, the marginal effects are calculated having as a reference the greatest category of the dependent variable, or in other words, considering the very good health status.

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Table 1: Marginal Effects for the Health equation for the year of 2008 (Results of research)

	BR	NO	NE	SE	SU	CO
Age	-0.005*** (0.000)	-0.004*** (0.000)	-0.004*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.004*** (0.000)
Age 1 (4-9 years)	-0.048*** (0.002)	-0.034*** (0.005)	-0.034*** (0.004)	-0.052*** (0.006)	-0.061*** (0.006)	-0.045*** (0.005)
Age 2 (10-14 years)	-0.017*** (0.002)	-0.014*** (0.004)	-0.010** (0.003)	-0.022*** (0.003)	-0.027*** (0.004)	-0.018*** (0.004)
Years of study	0.014*** (0.000)	0.009*** (0.000)	0.007*** (0.000)	0.016*** (0.000)	0.017*** (0.000)	0.016*** (0.000)
Personal Income	0.010*** (0.000)	0.005*** (0.000)	0.006*** (0.000)	0.012*** (0.000)	0.009*** (0.000)	0.008*** (0.001)
Gender	0.045*** (0.001)	0.041*** (0.004)	0.047*** (0.002)	0.042*** (0.002)	0.036*** (0.004)	0.053*** (0.004)
Black	-0.007** (0.003)	0.004 (0.007)	-0.004 (0.004)	-0.010* (0.005)	0.007 (0.01)	-0.014* (0.007)
Urban	0.002 (0.004)	-0.012 (0.010)	-0.022*** (0.006)	0.013 (0.009)	0.018* (0.01)	-0.004 (0.011)

*, ** and *** denote significance at 10%, 5% and 1% respectively.

With relation to the educational level, it was found, as expected and pointed by the literature, a positive association with the health status. Therefore, a higher schooling level increases the chances for the individual to present a very good health status. For the country as a whole, the increase of one year of study increases raises by 1.4 p.p. such chances. From among the regional discrepancies, the one which takes places between the Northeast and South region stands out, in which, in the former region, the increase is of the magnitude of 0.7 p.p., while in the latter is of 1.7 p.p..

Personal income impacted positively on the health status, indicating that, for the country as a whole, for instance, the increase of a unit in the income brings about a rise by 1 p.p. in the probability for the individual to present a very good health status. In that sense, the increase by R$ 100 (local currency) in the personal income, and everything else constant, increases by about 4.6 p.p the chances for the individual to have a health status considered very good.

The effect of the personal income upon the health status possesses distinct impacts on the regions of the country. The North and Northeast regions proved less sensitive than the other regions, pointing out that the income increase by R$ 100,00 (local currency) for the North, for example, increases by 2.3 p.p. the chances for the individual to have the health status considered very good, while in the Southeast is of only 5.5 p.p. the increase of that probability.

Gender showed itself as a significant factor in determining the chances for one to have a health status considered very good, which possibly, can be explained by its correlation with the income level. Giuffrida et al. (2005) point to the distinction in health status coming from gender, but, as previously stressed, estimated the models separately, which is not done in this

paper. Nicolella et al. (2008) also corroborate such result – males present increased probability of having a better health status.

In fact, for the country as a whole, being of the male gender increases by 4.5 p.p. the probability for the individual to present a very good health status. It is noteworthy to highlight, in that sense, the regional discrepancies verified. For instance, for the Central-West region, being a male increases by 5.3 p.p such a probability while in the South region, that increase is of 3.6 p.p.. Such a fact, likely, is recurrent from the greatest insertion of the female into the job market as well as from the greater acceptance of the society of her role.

In the Central-West region, from among the individuals employed in 2008, 41% corresponded to females, while in the South of the country, that percent was of 43%. The situation becomes worse when surveying in which income ranges are situated the female workers of each region. In the Central-West region, for example, 46% of the females employed stated to receive up to one minimum wage (in 2008), while in the South, 38% did so.

The ethnic issue, discussed from the variable *Black*, indicated that being of the black color decreases the probability for the individual to present a very good health status. Nicolella et al. (2008) presented a similar result – being a white increases the probability of having a good health status due to the closeness to hospitals, since they dwell in neighborhoods with more access to health. In general, the marginal effects were not statistically significant, except for the country as a whole and for the Southeast and Central-West regions, though weakly significant. For Brazil, the fact of being a black decreases by 0.7 p.p. the changes for having health status considered very good and, respectively, for the former and latter region, such a decrease is of the order of 1.0 and 1.4 p.p.

Living in urban or rural as a determinant of the health status only was significant for the Northeast and South regions. It is noteworthy to stand out that for the South region, the parameter was weakly significant at 10%. The results pointed out distinct impacts. For the first region, the fact for the individual to be situated in the urban area decreases by 2.2 p.p. the chances of presenting very good health status, while in the south region, there is an increase of 1.8 p.p. Nicolella et al. (2008) also did not find any significance in the distinction in the dichotomy urban/rural when the models with those dummies variables were estimated. On the other hand, Giuffrida et al. (2009) argued that living in the urban area increases the access to medical care and, therefore, they expected and found a positive relationship with health status. Therefore, for the South region, that variable is only weakly significant, its result is in agreement with that of Giuffrida et al. (2009).

The interpretation of the results discussed up to now and of the already existing literature points out that the implementation of a public policy, which delays the children's entrance to job market would be interesting. An initial strategy for minimization of the problem could occur via intensification in the inspection of the Family Allowance Program. So, an increase would occur in the probability for the individual to present a better health status coming from the delay in the entrance to job market as well as an increase in schooling level. Besides, the Child Labor Eradication Program (PETI), also implemented by the federal government, which involves the state and local spheres and which seeks to decrease the participation of the children in job market from the income transfer, would also act as a mitigation mechanisms of child labor.

5   CONCLUSION

The objective of the work was that of surveying the negative impact of child labor upon the health status of the grown-up. The descriptive survey of the data founded in a successful manner on the interpretation of the results from the use of the econometric models.

In general, it follows that child labor decreases the probability for the individual to present a good health status when grown up, but that the age in which the child is inserted into job market is also important in the determining of health status. So, though one cannot fight in a definitive way child labor, for matters which goes beyond the scope of this paper, a policy of delay of the entrance of the child to job market would be important.

Furthermore, the results pointed out that the greatest educational level as well as of *per capita income*, affect positively the probability of having a better health status. The regional results pointed out that homogeneous policies will not obtain homogeneous results. This took place because the early entrance to job market as well as other variables affect, in a distinct way, the health status of the individual.

The utilization of the year 2008 only, instead of recurring to the cohort technique, stands out itself as a limitation of the paper. In addition, the endogeneity problem was not taken into account in the models estimated. The subjective character of the variable which measures the health status of the individual can also be dealt as another limitation of paper. For future research, the joint carrying out of that study with the estimate of the earnings equation relating the current health status with earnings level is suggested.

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THE INFLUENCES OF ORGANIZATIONAL CLIMATE AND INNOVATIVE BEHAVIOR, OF THE ROLE OF JOB INVOLVEMENT IN ALBANIA REGION, UNDER EU STANDARDS

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ABSTRACT
Albania has taken steps towards bringing its legislation into line with the EU standards by approving a new public procurement law. The new law takes into account the principles of non-discrimination and equal treatment, transparency, and legal protection of interests of bidders on public contracts. Direct tendering has been abolished except in cases of extreme urgency and for the purchase of electricity, and criteria to identify abnormally low bids have been introduced. The new e-procurement regulations approved by the GOA in October 2007-2009 paved the way to the e-procurement system implementation at the central and local government level. This study aims to examine perceptions of politics among public sector employees as a possible mediator between the supervisor's leadership style and formal and informal aspects of employees' performance (Organizational Citizenship Behavior – OCB).In this paper we are trying to analyze the role of leaders in Albanian conditions. We are focus in three elements: Productivity, Adaptively of the leader roles, Infectivity on job time. These three elements are analyzed with indicators like that: Performance in job descriptions and monitory of leader's styles, organizational climates and innovative behavior.

Keywords: Anticorruption activities, Albanian reforms, Decisions, Local government, Public procurement, Tax administration

1   INTRODUCTION

The Public Procurement Advocate was established as an independent institution reporting to parliament. However, it has no particular executive powers and its functions duplicate the monitoring tasks of the PPA (C. S. George) Decisions on appeals are taken by the same unit of the PPA that is responsible for interpreting the law and giving advice to contracting authorities. Current procedures for handling complaints still do not meet recognized international standards. Overall, the improvements in the public procurement legislation are advancing while the proper enforcement of the law is still a work in progress (Hardt, 2009; Rieker, 2009). Most banks today offer unsecured lines of credit targeted to small business owners.

If yours is an established company, you may be able to apply for a credit line amount of between $10,000 and $50,000 by completing a simple one-page application, with no business financial statements or tax returns required. Institutionally, the successful implementation of the Northern Dimension Countries relies on using flexible coordination mechanisms. Within the EU, the Northern Dimension is part of the Union's external relations but cuts across all its three pillars: the funding instruments stem from the first pillar of the single market, the objectives come at least partly from the second pillar of external relations and some of the problems relate to the third pillar of justice and home affairs, including management of border regimes (C. S. George).

1.1   The purpose of this study

In this study we have aimed at the assessment of the strategic management level in Albanian companies. The study focuses companies and industries selected in the Albania environment. The purpose of the study is to analyze the business environment of the selected industries, how much do these industries know the environment in which they operate and how capable are they to get oriented in this environment. The study is conducted in the period on 2006-2012 years. Object of study were 230 companies located in Tirana, from which 150 small and medium companies and 80 big companies. The survey data was collected from questionnaire forms filled in by these companies. Two classification criteria were used in selecting the companies: the size of the firm and the nature of the industry the firm belong to.

The study is divided into three parts, where the strategic management level of these companies is studied based on each selection criteria. The first part of the survey examines and evaluates the strategic management level by considering the size of the firm. The second part analysis the strategic management level in a specific industry. The total number of 230 companies is divided into 5 industries: chemical industry, food, services, construction and engineering. The third and the final part studies the experience, knowledge, scale and intensity of competitors, predictability and diversity of business environment in selected industries, as well as attitudes or behavior of companies towards the future in this industry.

2   LITERATURE REVIEW AND HYPOTHESES

The performance evaluation is a process related to the identification, evaluation and development of the performance of all the employees in the organization, in order to achieve effectively the objectives, and in the same time the process is in the behalf of the employees. It helps the employees in knowing, receiving feedback and offering work and career services (Lansbury, 1988). They are often held back by lack of productive capacity, difficulties in diversifying their economy, poor infrastructure and export conditions. The Communication "Trade, growth and development", redefines how the EU's trade and development policy will work for the development of those poorer countries - in particular, Least Developed Countries (LDCs) - ensuring they can increasingly enjoy its benefits.

We discuss the most important digressions in turn. Given that both management and regulators are interested in the risk profile of financial firms, they have a shared interest in accurate measurement and, consecutively, management of risk. We then briefly outline measurement methods, primarily to discuss the most important hurdles that have to be taken before a firm-wide risk management system can be implemented adequately.

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2.1   An historical sight of the evolution system in Albania

During the last decade the Albanian Public Administration is going under a reformation process, a process related with the political, economical and social changes. At the beginning of the '90 the role of the Albanian state was modernized, and was stimulated to economic improvement and to conceal social injustice (Robins, 2002).

The new role of the state determined new obligations for the public, central and local administration. During this period the administration was nearly totally politicized and there were no clear divisions between the political and techno-professional functions. During this period the model of the political control was inappropriate and out of logic and it was still in the development phase.

During 1996-1999 the politicization of the administration ended and the administration was based on merits. The division between the political and techno-professional was clear. Several laws were approves; law no. 8095 in 21.03.96, "For the Civil Service in the Albanian Republic", The Decision of the Minister's Council no.657 in 16.09.96 "For ethic rules in the public service", law no. 8549 in 11.11.1999 "The status of the civil employee". All this laws were approved during this period. The administration had the possibility to implement a different system, in the human resources management in all the central and local institutions (Dhima, 2003).

After DAP, the Institution of Training for the Public Administration was funded in order to give response to all the circumstances, opportunities and to the new challenges. In 2000 was published the Instruction from the Council of Ministers no. 2 in 07.07.2000 "For the evaluation system of the individual annual achievements of the civil employees". In 2002-2006 the position of the General Secretary in each ministry was consolidated as a inter-mediator between the political and managerial levels. The performance evaluation was designed to evaluate the employees based on their work and the individual work descriptions in four levels (Ibrahimi, 2002).

2.1.1   Monetary policy and Albanian budget deficit

One of the key aspects of economic policy in Albania has been the tight fiscal and monetary policy. The budget deficit has been declined from 9 percent of GDP in 2000 to 6.6 percent in 2002. In addition, Bank of Albania has played a conservative interests rate policy by keeping its key interest rate well above CPI. Figure 2shows that in 1996 and especially 1997 the economy lost its momentum, reflected also in the increase of CPI (end of period) by 22.7 percent.

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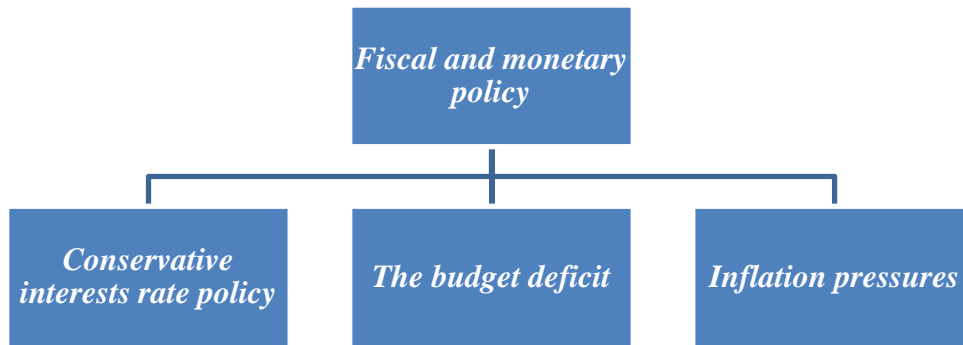
Figure 1: In 1996 and especially 1997 the economy lost its momentum, reflected also in the increase of CPI

3   METHODOLOGY OF THE STUDY

In this study we have intended to evaluate the level of strategic management in Albanian companies. The study focuses on the companies and industries selected in the Albanian environment. It intends to analyze the business environment in the selected industries, how much do these industries know the environment in which they operate and how much capable are they to get oriented in this environment. The study is conducted in the period May-December 2009. Object of study were 200 companies located in Tirana, from which 150 small and medium companies and 50 big companies. The survey data was collected from questionnaire forms filled in by these companies. Two classification criteria were used in selecting the companies: the size of the firm and the nature of industry the firm belong to.

The study is divided into three parts, where the strategic management level of these companies is studied based on each selection criteria. The first part of the survey examines and evaluates the strategic management level by considering the size of the firm. Results are classified in four thematic units as follows:

- Vision, mission and objectives of a firm, (Indicator 1)
- The use of analytical methods and formulation of strategy, (Indicator 2)
- Types of business strategies and reasons of their success or failure, (Indicator 3)
- Responsibility in Strategic Management, (Indicator 4)

Figure 2: Types of business strategies and reasons of their success or failure, indicators of development (Dumi, JERM 2012, p. 66)

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3.1 Analyzing data and regression analyze

The performance evaluation is mainly characterized by qualitative indicators and there are only a few quantitative indicators. According to the data collected from the questionnaires the employees asses the importance of the performance evaluation in 100%, they concretize it with the objectivity in the evaluation. To the question "Is the performance evaluation objective in your institution?"- 30% answered positively, 44% avoided the answer and 26% of them think that it is dictated from the subjectivity of the leaders. According to the questionnaire the major part of the questioned employees think that the performance evaluation takes to conflicts between the subordinate and the superiors. This is also another factor that contests rewarding according to the performance.

3.2 Design the study, methodology and approach *of the study*

The Multifactor Leadership Questionnaire (MLQ) was distributed to employees of a public security organization in Albania, asking them to evaluate their supervisor's style of leadership. Employees were also asked to report their perceptions of organizational politics using the scale developed by the leaders in Albania Region. In addition, supervisors provided objective evaluations of the levels of their employees' in-role performance and OCB. The intra-structure of the leadership variable was examined by exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) with structural equation modeling. Two alternative models were examined: first, a model of mediation and second, a direct model with no mediation (Dumi, 2012).

3.3 Public Administration and its involved

Even though generally the employees of the Public Administration were evaluated very good and good, still there is work that needs to be done regarding the personal qualification. The personal qualification often is referred to the trainings that the employees of the public administration, which is very important. Until nowadays only a small part of the employees are involved in doctorate studies. The employees are still far from career commitments, and this is why only a few of them represent scientific publications for their sector (Dumi, 2012).
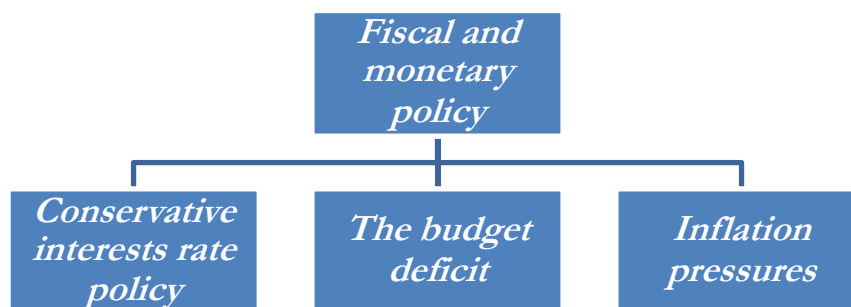
Figure 3: In 1996 and especially 1997 the economy lost its momentum, reflected also in the increase of CPI

And this is why we pretend that the performance evaluation does not justify its objectives because it is based only in the commitment related to the job. To create the conviction for this problem a hypotheses came out:
H1: The performance evaluation in the public administration is objective.

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The question "Is the performance evaluation objective?" was analyzed in details and the answers were evaluated from 1-10 points each, nine of the questioned persons were leaders and employees.

The respective evaluations are presented below:

Four indicators of development of the business modeling	(Indicator 1) Performance, mission, vision	(Indicator 2) Formulation strategy	(Indicator 3) Business strategy	(Indicator 4) Responsibility of business	(Indicator without choice)
First choice	4.6	8.6	7.2	9.6	
Second choice	4.34	7.45	5.27	6.56	4.89

We join both choices in one and keep the identity by underlining (for ex. the second choice)

values	<u>4.23</u>	<u>4.45</u>	<u>5.79</u>	<u>6.55</u>	<u>7.67</u>	7.89	7	8	9
Ranks	1	2	3	4	5	6	7	8	9

We calculate the sum of the first choice and the average

$R_{1o} = 6+7+8+9$

$M_R = \frac{n1(n1+n2+1)}{2} = \frac{4(4+5+1)}{2} = 20$

We calculate the quadratic average derivation of the Man Whitney criteria

$S_{R1} = \sqrt{\frac{n1n2(n1+n2+1)}{12}} = \sqrt{\frac{4.5(4+5+1)}{12}} = 4.8$

We calculate the factual value Zf and is compared with Zk that is the statistic value at a critic level.

$Zf = (R_{1m} - M_R)/S_{R1} = (30-20)/4.8 = 2$

$Zf > Zk ; 2>1.76$

This calculation shows that the hypothesis is not valid.

In the performance evaluation the subjectivism has high levels. It is important to find other parameters for the evaluation, and this is a commitment of this article in the future.

3.3.1 Findings *by regression analyze*

The research resulted in mixed findings that only partially support the mediating effect of organizational politics on the relationship between leadership, in-role performance and OCB. A direct relationship between leadership and performance (in-role and OCB) was also found.

We calculate the sum of the second choice and the average

$R_{1o} = 1+2+3+4+5$

$M_{R \, per \, r=1 \, to \, 5} = \frac{n1(n1+n2+1)}{2} = \frac{5(4+5+1)}{2} = 25$

In principle, three types of strategies can be distinguished. Banks can try to shift un-diversifiable risks to their borrowers, e.g., by making variable-rate loans and mortgages. - Banks can try to shift un-diversifiable risks to their lenders, e.g., by financing fixed-interest loans with fixed-interest obligations of similar maturities. Banks can try to shift un-diversifiable risks to third parties, e.g., through interest rate swaps or other derivative instruments. These strategies can of course be used in combination as well as separately. For

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the purpose of the analysis though it is easier to look at each of them in isolation (Dessler, 2002)

We calculate the quadratic average derivation of the V criteria of Vodrich model

$$S_{R1} = \sqrt{\frac{n1n2(n1+n2+1)}{12}} = \sqrt{\frac{4.5(4+5+1)}{12}} = 4.8$$

$$S_{R1\ to\ 6} = \sqrt{\frac{n1n2(n1+n2+1)}{12}} = \sqrt{\frac{5*6(I1+I2+I3+I4+I5)}{12}} = S_{R1} = \sqrt{\frac{n1n2(n1+n2+1)}{12}} = \sqrt{\frac{4.5(4+5+1)}{12}} = 4.8$$

$$S_{R1N} = \sqrt{\frac{n1n2(n1+n2+1)}{12}} = \sqrt{\frac{4.5(4+5+1)}{12}} = 4.8 *20 = 96$$

VSRIN =96 In the performance evaluation the subjectivism has high levels The performance evaluation is determined as an evaluation of the past and actual performance of an employee that works in accordance with the performance standards of the organization.
The evaluation process includes (Vodrich and Dessler, 2008):
- Setting the work standards.
- Evaluating the actual performance according to the standards.
- Gives the feedback at the employee in order to motivate him to diminish its feeblenesses.

H2.Governments should also act to improve awareness among entrepreneurs of the range of financing options available to them from officials, private investors and banks.

General Business Development: The ambition and comprehensive macroeconomic program undertaken by Albanian Government after 1997 yielded quick results in macroeconomic stability followed also by increasing real GDP at satisfactory rates. Over the period 1998-2002, contribution of private sector in GDP growth is obvious. In the Report this is demonstrated by increasing share of service sector (where dominate private firms) to GDP formation, as well as in increasing the number of employment in private enterprises compared with those in public enterprises especially in construction and trade sectors. Private sector's contribution to GDP became more important

4 DISSCUSSION BY ANALYZE OF THIS PAPER RESEARCH
This study empirically examines the impact of debt management policies on borrowing costs incurred by state governments when issuing debt in the municipal bond market. Based on positive political theory and the benefit principle of taxation, it is proposed that states that adhere to best practice debt management policies transmit signals to the credit ratings, investment community and taxpayers that the government should meet its obligations in a timely manner, resulting in lower debt costs. [1]The donors concurred with this assessment.

IDA, starting with the 1998 CAS, considered governance and institution building as one of the central planks of its intervention and identified the need to adopt and implement reforms to build an accountable and transparent state as the most important challenge facing the Government of Albania. The performance evaluation is a process that makes the employees

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[1] Donors and government investments, IDA.

reflect, discuss and change their working methods. During the process the individuals can change their working methods and there may be changes even in their behavior. At the institutional level the process enables the systematic collection of data about the individual's performance. The performance evaluation of the employees has two objectives:

First administrative objectives of this paper research
It gives information in setting the salary, promotions, firing, and assures the necessary documentation to verify decisions in juridical processes.

$$S_{R1 \text{ to } 6} = \sqrt{\frac{n1n2(n1+n2+1)}{12}} = \sqrt{\frac{5*6(I1+I2+I3+I4+I5)}{12}}$$

This analyze is optimal in our condition and its is necessary to progress in the second hypotheses of this research.

The mistake of regression analyze varied: 25 <SRI< 96

Second, and maybe the main objective is the objective of the development. The information can be used to diagnose the needs for trainings, career planning etc. the feedback and the training based on the information of the evaluation assures the fundaments for constant performance improvement (Robins and Couter, 1999).
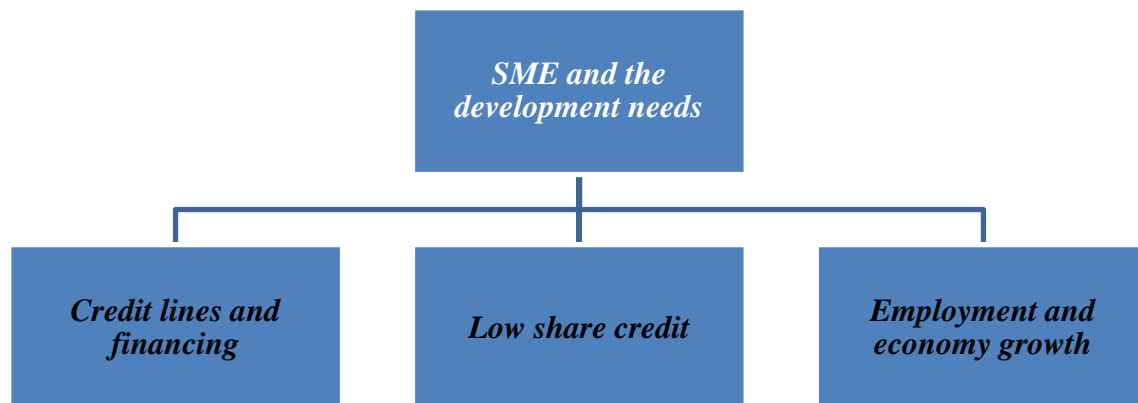
Figure 4: Commercial banks, the main source of finance for SMEs

4.1 Conclusions and Recommendations

The assistance and training was also expanded to cover financial operations o f the water works o f the participating towns. Participating towns, local authorities, and the PIU all demonstrated sound commitment and in implementing the project in a timely fashion.[2] A comprehensive approach to provision of water supplies is required to address competition for scarce water resources. We recommend these conclusions:
Albanian actors will be reality these points:

- A dynamic local government leadership for protection the health of people
- A coherent strategy acted upon with determination
- A healthy climate of cooperation with business
- Local government's investment initiatives to jumpstart the stagnant economy

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[2] Municipal Water and Wastewater Project, March 2003.

- Creative use EU funds to implement local policy.

Albania, in the last 5 years, has followed a tight fiscal and monetary policy. The budget deficit has declined from 9 percent of GDP in 2000 to 6.6 percent in 2002. In addition, the Central Bank of Albania has played an active interests rate policy by keeping its key interests rate well above CPI. Inflation pressures were kept under control in 1998 and CPI has moved in the narrow band of -1 to 4 percent in recent years. Interest rates applied by commercial bank for credits in Lek have decreased in the last 3 years.

The results from this article show that the performance evaluation is a very important element in the Public Administration, and it effects the improvement of the work in the state and central bodies.

- The performance evaluation conditions the emplacement and the implementation of the standards as referential points. Emplacing standards would increase the responsibility for each post in the Public Administration and will help in monitoring the performance of the institution.
- Despite the continuous improvements after 1990, there are still lacks and gaps in the performance evaluation and this harms the public opinion for the Public Administration.
- One of the lacks is the considerable subjectivism during the performance evaluation, which was proved by the contemporary methods, with the Man Whitney method for the minor choices where Zf is larger than Zk, and this showed that the hypothesis about the objectivity of the performance evaluation is not available.

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Challenges of the Modern World - Contemporary Economy and Globalization

REFORMING POLICY AND CLIMATE CHANGE MANAGEMENT OF ALBANIA AS AN EU CANDIDATE COUNTRY

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ABSTRACT
In this study we have aimed at the assessment of the strategic management level in Albania. The study focuses companies and industries selected in the Albanian environment. The purpose of the study is to analyze the business environment of the selected industries, how much do these industries know the environment in which they operate and how capable are they to get oriented in this environment. The study is conducted in the period 2012.The survey data was collected from questionnaire forms filled in by these companies. Two classification criteria were used in selecting the companies: the size of the firm and the nature of the industry the firm belong to. The study is divided into three parts, where the strategic management level of these companies is studied based on each selection criteria. The first part of the survey examines and evaluates the strategic management level by considering the size of the firm. Diversity in management practices as we go around the world has been recognized in U.S management literature for more than 30 years. The term "comparative management" has been used since the 1960s to 2011. However, it has taken much longer for the U.S academic community to accept that not only practices but also the validity of theories may stop at national borders and I wonder whether even today everybody would agree with this statement. The results show that behavioral differentiation affects perceptions of effectiveness. Contrary to the hypothesis, the effects of the four measures of behavioral differentiation on perceptions of effectiveness are not all positive and not all significant. It is interesting that behavioral differentiation affects subordinates and peers perceptions of effectiveness negatively and superiors perceptions of effectiveness positively in management steeps.

Keywords: General management theory, Leadership, Leadership performances, Nature of organizational work, Transfer of roles, Validity of theories

1 INTRODUCTION

Albania, one of the smallest countries in Eastern Europe, has experienced a period of transition marked by sharp economic swings and periods of civil strife. The early phases of decentralization witnessed the transfer of political autonomy, limited administrative and fiscal authority to local governments, inadequate legislation outlining central/local responsibilities, scarce financial resources and developing ITC projects to manage touristic services. In January 2006, the government promulgated a national Strategy for the Decentralization and the Local Autonomy which included laws to strengthen the autonomy of local governments and increase their capacity to manage local infrastructure and services. The Albania Government has in its focus issues related to tourism. The concept of behavioral complexity implies that a more holistic examination of a manager's leadership performance should be conduced than is done in more traditional leadership research approaches. Future leadership

research needs to take serious Van Fleet and Yukl's (1986) assertion that upward and lateral influence can be as important as downward influence to the accomplishment of an organization's mission (Bass, 1990, p. 908). in addition, future leadership research should not only use "more sophisticated evaluations of the interactional processes of leaders…with subordinates…peers and superiors" (Bass, 1990, p. 880), but also more sophisticated evaluations of the interactional processes of leaders as members of cross-functional, cross-departmental, cross-company, and cross-national teams. This paper revisits the role of targeted transfers in poor countries in the light of the new theories on the social costs of uninsured risks and unmitigated inequalities. Recognizing that the policy implications depend crucially on whether there is good empirical evidence to support the theoretical arguments, the bulk of the first half of the paper discusses the evidence.

Katz and Khan (1978) considered "the influential increment over and above mechanical compliance with the routine directives of the organization" to be the essence of leadership. Their definition does not limit the study of leadership to superior-subordinates relationships. Managers can exert leadership in their interactions with different types of followers, including peers and superiors. The changing nature of organizational work (Kanter, 1989; Conger, 1993) requires us to take a broader perspective of leader-follower relationships.

1.1 Implications for management theory

Cultural differences between nations can be, to some extent, described using first four and now five, bipolar dimensions. The position of a country on these dimensions allows us to make some predictions on the way their society operates, including their management processes and the kind of theories applicable to their management. As the word culture plays such an important role in my theory, let me give you my definition, which differs from some other very respectable definitions. Culture to me is the collective programming of the mind which distinguishes one group or category of people from another. In the part of my work I am referring to now, the category of people is the nation. Culture is a construct that means it is "not directly accessible to observation but inferable from verbal statements and other behaviors and useful in predicting still other observable and measurable verbal and nonverbal behavior".

Revisiting the equity-efficiency trade-off
The presumption that there is an aggregate trade off between the twin goals of economic growth and lower inequality can be questioned for a number of reasons including the following: Unless a person can initially assure that her basal metabolic rate (BMR) — the food energy intake needed to support bodily functions at rest — is reached there can be no productive activity of any sort. This "threshold effect" can mean that an economy generates massive involuntary unemployment under one distribution of assets, while a more equitable distribution yields full employment and high output (Dasgupta and Ray, 1986).

It should not be reified; it is an auxiliary concept that should be used as long as it proves useful but bypassed where we can predict behaviors without it. The first dimension is labeled Power Distance, and it can be defined as the degree of inequality among people which the population of a country considers as normal: from relatively equal (that is small power distance) to extremely unequal (large power distance). All societies are unequal, but some are more unequal than others.

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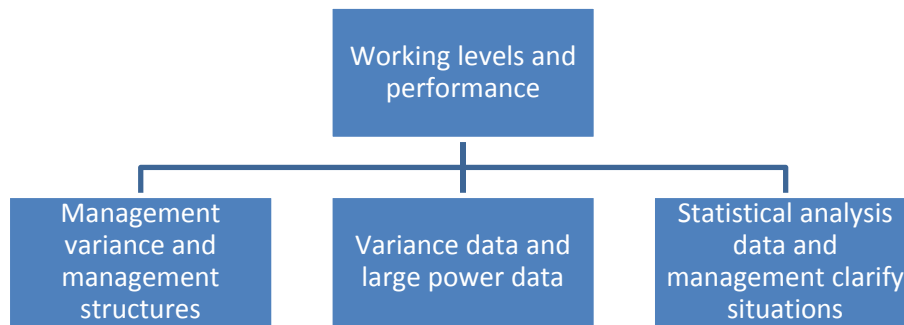
Figure 1: Four dimensions of PD management levels (Kantter, 1989)

These arguments are fine in theory, but what does the evidence suggest? Compilations of aggregate data on growth and distribution suggest that countries with higher initial inequality tend to experience lower rates of growth controlling for other factors including initial income, openness to trade and the rate of inflation.

Indeed, if inequality is sufficiently high, countries that would have good growth prospects at low inequality may well realize little or no overall growth or progress in reducing poverty. It has been estimated that about one fifth of the date-country combinations in a data set for developing countries were cases in which inequality was so high as to stifle pro-poor growth (Ravallion, 1997b). The some applies to the dimensions I introduced. They are constructs too that should not be reified. They do not "exist"; they are tools for analysis which may or may not clarify a situation. In my statistical analysis of empirical data the first four dimensions together explain 49 percent of the variance in the data. The other 51 percent remain specific to individual countries. The first four dimensions were initially detected through a comparison of the values of similar people (employees and managers) in 64 national subsidiaries of the IBM Corporation. People working for the same multinational, but in different countries, represent very well-matched samples from the populations of their countries, similar in all respects except nationality.

2   LITERATURE REVIEW AND HYPOTHESES

An article I published in Organizational Dynamics in 1980 entitled, "Do American Theories Apply Abroad?" created more controversy than I expected. The article argued, with empirical support, that generally accepted U.S theories like those of Maslow, Herzberg, McClelland, Vroom, only very partly apply outside the borders of their country of origin-assuming they do apply within those borders. Among the requests for reprints, a larger number were from Canada than from the United States. The choice of control variables in identifying the relationship is also open to question.

For example, past tests of the effect of inequality on growth have controlled for the human capital stock, yet reducing investment in human capital is presumably one of the ways that inequality matters to growth. The validity of the common assumption that initial inequality has a linear effect on aggregate growth is also questionable: Banerjee and Duflo (1999) find evidence that changes in income inequality are bad for growth, whichever way the changes go. Then policies that prevent rising inequality are good for growth, but those that reduce current inequality are not.

Given the concerns about tests using country-level data, it is promising that these theories also have some testable implications for micro data. The following are examples:• Farm yields (output per acre) in poor countries tend to be lower the larger the landholding; Binswanger et al. (1995).

2.1 American management theories and the different dimensions

In comparison to other countries, the U.S. culture profile presents itself as below average, highly individualistic, fairly masculine, and short-term oriented. The Germans show a stronger uncertainty avoidance and less extreme individualism: the Japanese are different on all dimensions, least on power distance; the French show larger power distance and uncertainty avoidance, but are less individualistic and somewhat feminine; the Dutch resemble the Americans on the first three dimensions, but score extremely feminine and relatively long-term oriented; Hong Kong Chinese combine large power distance with weak uncertainty avoidance, collectivism, and are very long-term oriented. There is empirical support for another link between inequality and growth, via the incidence of under-nutriton. This is likely to lower aggregate productivity. For example, it has been found that undernourished farm workers in poor countries tend to be less productive (Strauss, 1986; Deolalikar, 1988). Also, malnutrition in children is thought to have adverse long-term consequences for their learning and hence future incomes; supportive evidence can be found in Bhargava (1999) (for Kenya), Glewwe et al. (2001).

H1: The concept of management and development of leader theories.
H2: Smith and Mill used "management" to describe a process and "managers" for the persons involved, "management" in the American sense which has since been taken back by the British-refers not only to the process but also to the managers as a class of people?
H3: Local management is part of this infrastructure; it cannot be imported in package form. Assuming that with so-called modern management techniques and theories outsiders can develop a country has proven a deplorable arrogance.

2.1.1 Cultural constraints in management theories

 Employees and managers are human. Employers as humans, was "discovered" in the 1930s with the human relations school. Managers as humans was introduced in the late 40s by Herbert Simon's "bounded rationality", elaborated in Richard C and James March's Behavioral theory of the firm (1963 and recently republished in a second edition) my argument is that management scientists, theorists and writers are human too: they grew up in a particular society in a particular period and their ideas cannot help but reflect the constraints of their environment.

Whether it is the poor who incur the largest costs of uninsured risk is not as obvious as is often claimed by casual observers. Jalan and Ravallion (2001b) tested for portfolio and other behavioral responses to idiosyncratic risk in the same rural areas of southwest China. They confirmed other findings that wealth is held in unproductive liquid forms to protect against idiosyncratic income risk. However, consistently with expectations from their theoretical model, they found that neither the poorest quintile nor the richest appear to hold liquid wealth because of income risk; it is the middle-income groups that do so. It appears that the rich in this setting do not need to hold precautionary liquid wealth, and the poor cannot afford to do so. The idea that the validity of a theory is constrained by national borders is more obvious in Europe, with all its borders, than in a huge borderless country like the U.S. Already in the sixteenth century Michel de Montaigne, a Frenchman, wrote a statement which was made

famous by Blaise Pascal about a century later: " Vérite endeça des Pyrenées erreur au-delá " - There are truths on this side of the Pyrenées which are falsehoods on the other. According to the comprehensive 10-volume Oxford English Dictionary (1971) the words "manage", "management" and "manager" appeared in the English language in the 21th century. The oldest recorded use of the word "manager" is in Shakespeare's Love's, dating from 1558, in which Don Adriano "a fantastical Spaniard", exclaims (Act I, scene 188).Finding that transfers based on indicators of current poverty can bring long-term benefits, given factor market imperfections does not mean that they are the best policy option for this purpose. Policies to increase factor mobility can also have a role. Incentives to attract private capital into poorly endowed areas, and/or encourage labor migration out of them, could well be more poverty reducing than targeted transfers. There has been very little work on these policy choices, and one often hears overstated claims by advocates.

2.2 The science of economics and general Smith concepts

The founder of the science of economics, the Scot Adam Smith, in his 1776 book The Wealth of Nations, used "manage", "management" (even "bad management") and "manager" when dealing with the process and the persons involved in operating joint stock companies (Smith, V.) British economist John Stuart Mill (1806–1873) followed Smith in this use and clearly expressed his distrust of such hired people who were not driven by ownership. Since the 1880s the word "management" appeared occasionally in writings by American engineers, until it was canonized as a modern science by Frederick W. Taylor in Shop management in 1903 and in "The Principles of Scientific Management" in 1911.
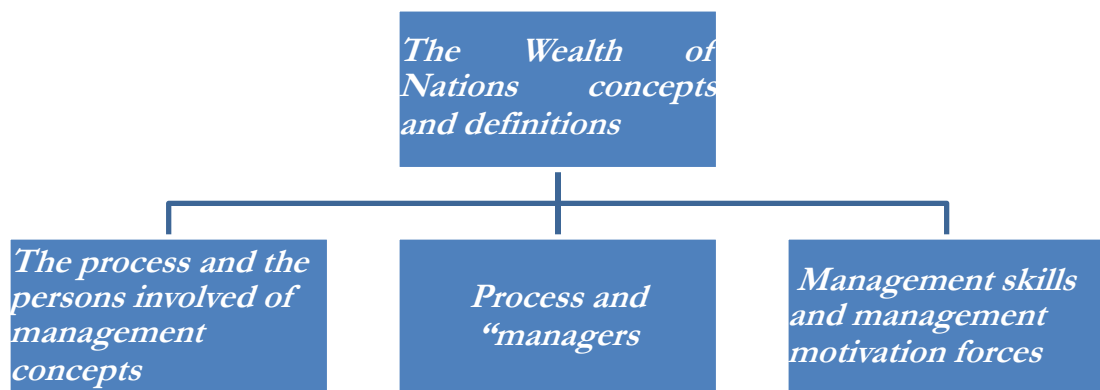
Figure 2: Frederick W. Taylor in Shop management in 1903 (The Principles of Scientific Management in 1911)

While Smith and Mill used "management" to describe a process and "managers" for the persons involved, "management" in the American sense which has since been taken back by the British-refers not only to the process but also to the managers as a class of people. This class (1) does not own a business but sells its skills to act on behalf of the owners and (2) does not produce personally but is indispensable for making others produce, through motivation. Members of this class carry a high status and many American boys and girls aspire to the role. In the U.S the manager is a cultural hero.

2.2.1 Management in contexts in modern economies

Sustainability and political economy:

While theory points to efficiency gains from permanent redistribution, the implications of short-term redistributions are less clear. The insurance gains from targeted transfers also depend on the sustainability of programs across different states of nature, including coverage across groups facing different risks. In these respects the record is mixed. Some programs like the EGS have been sustained over long periods, and appear to have provided effective insurance Let us now turn to other parts of the world. We will look at management in its context in other successful modern economies: Germany, Japan, France, Holland, and among the overseas Chinese.
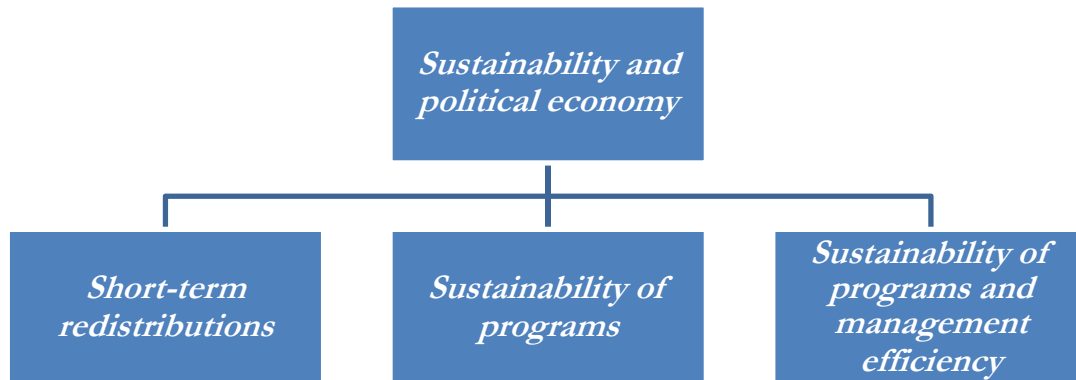
Figure 3: Management in contexts in modern economies (Bass, B. M. and Stogodill, 1990)

3   METHODOLOGY AND RESEARCH GOAL

Four-fifths of the world population, live in countries that are not rich but poor. After World War II and decolonization, the stated purpose of the United Nations and the World Bank has been to promote the development of all the world's countries in a war on poverty. After 40 years it looks very much like we are losing this war. If one thing has become clear, it is that the export of Western-mostly American-management practices and theories to poor countries has contributed little to nothing to their development. There has been no lack of effort and money spent for this purpose: students from poor countries have been trained in this country and teachers and Peace Corps workers have been sent to the poor countries. If nothing else the general lack of success in economic development of other countries should be sufficient argument to doubt the validity of Western management theories in non-Western environments.

3.1   Management transfer to poor countries

If we examine different parts of the world the development picture is not equally bleak, and history is often a better predictor than economic factors for what happens today. There is a broad regional pecking order with East Asia leading. The little dragons have passed into the camp of the wealthy; then follow Southeast Asia (with its overseas Chinese minorities), Latin America (in spite of the debt crisis), South Asia and Africa always trails behind. Several African countries have only become poorer since decolonization.

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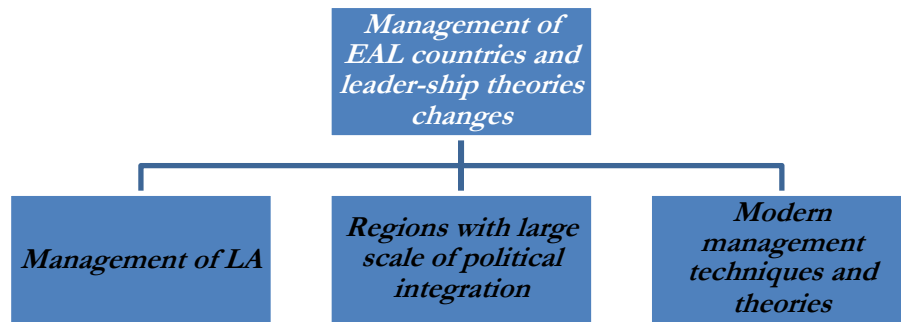
Figure 4: Management transfer to poor countries (Jon Stuart Mill, 1989)

Regions of the world with a history of large-scale political integration and civilization generally have done better than regions in which no large-scale political and cultural infrastructure existed, even if the old civilizations had decayed or been suppressed by colonizers. It has become painfully clear that development cannot be pressure-cooked; it presumes a cultural infrastructure that takes time to grow. Local management is part of this infrastructure; it cannot be imported in package form. Assuming that with so-called modern management techniques and theories outsiders can develop a country has proven a deplorable arrogance. At best, one can hope for a dialogue between equals with the locals, in which the Western partner acts as the expert in Western technology and the local partner as the expert in local culture, habits and feelings.

3.2   A theory of culture in management
Our trip around the world is over and we are back in the United States. What have we learned? There is something in all countries called "management" but its meaning differs to a larger or smaller extent from one country to the other, and it takes considerable historical and cultural insight into local conditions to understand its processes, philosophies and problems. If already the word may mean so many different things, how can we expect one country's theories of management to apply abroad? One should be extremely careful in making this assumption and test it before considering it proven. Management is not a phenomenon that can be isolated from other processes taking place in a society. During our trip around the world we saw that it interacts with what happens in the family, at school, in politics and government. It is obviously also related to religion and to beliefs about science. Theories of management always had to be interdisciplinary, but if we cross national borders they should become more interdisciplinary than ever.

3.3   Literature and Development concept
The second dimension is labeled Individualism and it is the degree to which people in a country prefer to act as individuals rather than as members of groups. The opposite of individualism can be called Collectivism, so collectivism is low individualism. The way I use the word it has no political connotations. In collectivist societies a child learns to respect the group to which it belongs, usually the family, and to differentiate between in-group members and out-group members (that is, all other people). When children grow up they remain members of their group, and they expect the group to protect them when they are in trouble. In return, they have to remain loyal to their group throughout life. In individualist societies a child learns very early to think of itself as "I" instead of as part of "we". It expects one day to have to stand on its own feet and not to get protection from its group any more; and therefore it also does not feel a need for strong loyalty.

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4 CONCLUSION

In fact the management theorist who ventures outside his or her own country into other parts of the world is like Alice in Wonderland. He or she will meet strange beings, customs, ways of organizing or disorganizing and theories that are clearly stupid, old fashioned, or even immoral-yet they may work, or at least they may not fail more frequently than corresponding theories do at home. Then, after the first culture shock, the traveler to Wonderland will feel enlightened and may be able to take his or her experiences home and use them advantageously. All great ideas in science, politics, and management have travelled from one country to another, and been enriched by foreign influences. The roots of American management theories are mainly in Europe: with Adam Smith, John Stuart Mill, Lev Tolstoy, Max Weber, Henri Fayol, Sigmund Freud, Kurt Lewin, and many others. These theories were replanted here and they developed and bore fruit. The same may happen again. The last thing we need is a Monroe doctrine for management ideas.

5 DISCUSSION

While leadership researchers have emphasized that managers need to vary the performance of their leadership functions depending on characteristics of their followers, the task, the organizational culture, their position power, and other factors, they have commonly equated followers with subordinates. The research presented in this paper has taken a distinctly different approach and examined the leadership behaviors of two groups of managers in their interactions with the members of their superiors and peers, in addition to their subordinates. The argument was made that in order for managers to be effective leaders in their interactions with their subordinates, peers, and superiors, they need to have a broad repertoire of leadership functions at their disposal as well the ability to vary the performance of these leadership functions depending on the organizations role of the person with whom they interact.

The results of this study show that behavioral repertoire has strong positive effects on subordinate, peer, and superior perceptions of effectiveness. These results indicate that to be effective it is important for managers to not only perform their leadership functions frequently in interactions with their subordinates, but also in their interactions with their peers and superiors. Having a broad portfolio of leadership functions at one's disposal will increase the likelihood that one can effectively meet the demands of the member of one's organizational role-set.

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UNIVERSITY COMPANY GOVERNMENT INTERACTION: FAPEMIG AS PROPELLER AGENT OF THE SCIENTIFIC-TECHNOLOGICAL DEVELOPMENT IN MINAS GERAIS[1]

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ABSTRACT
This article aims to present the main indicators for Science, Technology and Innovation (ST&I) generated by the Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG), in four years (2008-2011). The methodology used was a case study, with documentary research, held in the annual reports of activities of the Foundation. The results showed that all indicators analyzed in aggregate form, evolved gradually. It is concluded that the FAPEMIG comes complying with their mission to induce and encourage research and scientific and technological innovation for the development of the State of Minas Gerais in the Southeast region, maintaining the recognition as one of the main agents of development inductors scientific, technological and innovation in Brazil.

*Keywords**: Development, Innovation, University*

1 INTRODUCTION

The constant promotion of science, technology and innovation (ST&I) allows a nation to achieve sustainable socio-economic development. Federal Law nº 10.973/04 of Brazil "establishes incentives for innovation and scientific and technological research in the productive environment, with a view to training and within the reach of technological autonomy and industrial development of the country", encouraging the construction of specialized environments and cooperative innovation (Brazil, 2004).

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[1] We would like to take this opportunity to thank to the FAPERN/MCT/CNPq/CT-INFRA Nº005/2011 First Projects Program - PPP Infrastructure Program for Young Researchers.

In Brazil, through agencies, foundations and funds, to finance actions linked to ST&I happen so as to contribute to the development of the country. As the foundations of support to research in the country, the most representative are linked to a federal State, where some of them have assured operation are supported by State laws that ensure financial transfer in 1% of all State tax collected.

According to MEC (2012, p. 1), "the foundations are institutions created with the purpose of supporting the projects of research, teaching, and extension of institutional, scientific and technological development, the interests of federal institutions of higher education (IFES) and research institutions also", thus being able to contribute faithfully to the achievement of national innovation systems in a nation.

In numbers, the CONFAP (2012) Brazilian national territory confirms that there are 24 state foundations, these three have higher representativeness for funding, in large financial flows, ST&I. The *Fundação de Amparo à Pesquisa do Estado de São Paulo* (FAPESP), *Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro* (FAPERJ) and *Fundação de Amparo à Pesquisa do Estado de Minas Gerais* (FAPEMIG) make up this trio.

In this context, choosing the FAPEMIG as case to be studied, the research aims to present the main indicators for Science, Technology and Innovation (ST&I) generated by the Foundation. For both the Organization of the present study begins with this introduction, followed by Section 2, literary review, which highlights concepts relevant to research. In continuity, in section 3, method, the methodological procedure used in the research is cited. Later, in section 4 is described in the object of study, recounting a brief history of the Foundation. The results can be observed Section 5, results, and shortly thereafter in section 6 are the conclusions. Finally, references are presented the bibliographies used.

2 LITERARY REVIEW

2.1 Innovation and Competitiveness

Zaltman et al. (1973) defines innovation as an idea, practice or a material that is perceived as new and relevant application. Thus, Dosi (1998) confirm that search involves innovation, experimentation, discovery, development, and adoption of new products, new production processes and new organizational settings.

The ability to generate technological innovation is proportional to the economic development of a nation. The economist Joseph Schumpeter He was one of the first proponents of this binding between a country's development and its ability to innovate. The original idea of Schumpeter and which to this day guides the thought of a broad group of economists, called neo-schumpeterian, is that technological innovation is the engine of economic development.

In the current environment, marked by competitiveness, innovation is seen as a way to overcome competition and achieve competitive advantage. From innovation strategies, opportunities can be converted into new ideas and put into widespread practical use (Tidd et al., 2001).

According to Rogers (2003, p. 140) the "most innovations are created by scientific research, although they often result from the interaction between scientific methods and practical problems ". Therefore the "innovation is no longer perceived necessarily as linear process, but

as a result of the complex interaction of various actors and institutions that constitute a system of agents strongly interdependent" (OECD, 1999, p. 11).

Tidd et al. (2001) evidenced during the Decade of 1990, through his researches in industrial organizations and English services, organizations can use innovation to differentiate their products and services, are typically twice as profitable as the others.

Understanding innovation as economic power, at the end of 2004, the Brazilian Federal Government sanctioned the innovation law (Law no. 10.973). Barbosa (2006) explains that this law encourages the promotion of science, technology and innovation in the industry, seeking the improvement of technological skills and Brazilian industrial development. This law covers important aspects as cooperation between science and technology institutions and enterprises, the Division of laboratories, incubation of small enterprises in public research institutes, services of P&D for businesses, the establishment of technology transfer offices (TTOs), as well as the participation of researchers in economic gains generated by the inventions and innovative sponsorship (Maculan, 2005; Mello, 2005).

2.2 National Innovation System

Freeman (1995) sets the National Innovation System as a set of institutions, actors and mechanisms in a country contribute to the creation, advancement and dissemination of technological innovations. Simonini (2010) includes the universities, companies, research institutions and other associations as actors, which in turn relating to the market and the current financial system, converges to the formation of the Innovation System (IS).

The OECD (1999) presents a pattern of co-operation in national innovation systems, in which we highlight the following: cooperation between University and industry; geographical proximity; innovation depends on cooperation; knowledge-intensive services; informal cooperation and trust; and finally is rising that the innovation system has different patterns of cooperation.

There is a diversity of systems because of their stage of development in which countries. According to Albuquerque (1999) this diversity could be perceived by the characteristics of the configuration of each system, such as the specifics of innovative companies, the interaction between firms and universities or research institutions, and even the various forms of financing of research and innovation.

2.3 Cooperation between: university, company and government

The cooperation between University, Government and company appears at the beginning of the 21st century as an instrument to promote technological development, dissemination and uptake of innovations. According to Queiroz (2007, p. 3) " The ability to innovate depends on the conduct of scientific research and requires human resources capable of generating and transmitting new knowledge ".

In this context, the role of universities has been acquiring greater relevance, since they still present themselves as the main locus in the trainer of new knowledge (Rapini, 2007).

In this scenario, it is crucial to the existence of an academic institution that plays a role in the innovation system and in the social, technological and economic development of the country. The University aims to be enterprising demand creation of complex structures within it to

House companies of technological base, promoting cooperation between researchers and local businessmen.

The effects caused by these changes drive the debate about what is the appropriate role that universities should play in matters related to technology and knowledge transfer.

Etzkowitz and Leydesdorff (2000) believe that, in response to this new environment, universities should take ownership of a "third mission". In addition to contributing to the development of the country with the formation of high-level human resources and research, third mission would seek to incorporate the mission to contribute more directly to economic development through cooperative and collaborative initiatives with the productive sector in order to achieve greater applicability for the knowledge produced.

Within this context, the entrepreneurial University differentiates itself from others with regard to three basic characteristics: support for entrepreneurial activities; existence of mechanisms for interface, such as the offices of technology transfer; and a significant number of employees capable of creating companies (Dzisah and Etzkowitz, 2009).

3 METHOD

As to the nature, this research is classified as applied. In relation to the objectives, this research is descriptive and exploratory. As for the approach, classified as qualitative using the case Study method.

The survey took place in two stages. The first corresponded to bibliographical research, in which it was necessary to review the existing literature and define the scope for the search, creating products such as the theoretical and research basis identification. The second was the documentary analysis phase, in which it was necessary to verify the common indicators for Science, Technology and Innovation (ST&I), in the reports consulted, making possible the formation of the results.

The documentary analysis phase, covered the annual activity reports in the period from 2008 to 2011, accessed via the Foundation's institutional website.

4 STUDYING OBJECT

The *Fundação de Amparo à Pesquisa do Estado de Minas Gerais* (FAPEMIG) is a foundation of the State Government, linked to the Secretary of State for science, technology and higher education, was created by Law Delegated nº 10, from August of 1985. Has the mission: "induce and encourage research and scientific and technological innovation for the development of the State of Minas Gerais", seeking "be recognized as the principal agent inductor scientific, technological development and innovation in the State of Minas Gerais" (Fapemig, 2011, p. 18).

Their performance is linked to the financing of scientific and technological research projects, in encouraging the training of human resources for Science and technology, the establishment of scientific and technological research groups, in promoting the productive sector and integrative research institutions and development, supporting the Organization of scientific and technological events, to carry out exchanges between Brazilian and foreign researchers in the Routing and guidance of patenting and commercialization of innovative products and processes.

The beneficiaries of the actions performed by FAPEMIG consist of Minas Gerais-based institutions or researchers that they maintain bond that falls in one of the following categories: i. Scientific, technological Entities and Innovation – STEIs; II. Direct and indirect administration corporations of the Government of the State of Minas Gerais, aimed at the development of S,T&I or other related scientific and technological activities; III. Associative entities, not-for-profit whose objectives are geared towards the promotion of scientific and technological development; IV. Private companies, enterprise companies, incubators, technology parks and the like, serving notices and specific programs; V. individual Researchers to keep some ties to STEIs. the activities developed by FAPEMIG are ensured by the State Constitution, which determines the allocation of 1% of the current budget revenues of the State for the promotion of science, technology and innovation.

5 RESULTS

In the quadrennium, the State Treasury provided USD 499 million, which added to external funds obtained, totaled USD 589 million invested in actions to promote the ST&I as shown in table 1.

Table 1: Kept financial resources (Authors, 2012)

YEAR	STATE TREASURE	OWN AND EXTERNAL RESOURCES	TOTAL	% GROWING
2008	US $ 110 millions	US $ 13 millions	US $ 123 millions	-
2009	US $ 102 millions	US $ 14 millions	US $ 116 millions	-5,6%
2010	US $ 132 millions	US $ 29 millions	US $ 161 millions	38,7%
2011	US $ 155 millions	US $ 34 millions	US $ 189 millions	17,3%
TOTAL:	**US $ 499 millions**	**US $ 90 millions**	**US $ 589 millions**	

As the targeting of funds raised in the quadrennium, the research projects, adding their natures (universal, induced, special, Endogovernamental and structuring) achieved major transfers, followed by investment in human resource training and scholarships, administrative costs, promotion of scientific and technical studies events and dissemination actions. Table 2 details the allocation of those resources.

Table 2: Percentual execution of the financial resources (Authors, 2012)

	ITEM	2008	2009	2010	2011
01	Research Projects - Universal	24,9%	25,3%	17,0%	19,5%
02	Research Projects - Inducted	17,0%	21,9%	29,3%	27,3%
03	Scholarship and HR formation	24,9%	25,3%	17,0%	17,8%
04	Scientific Events	2,4%	2,0%	2,2%	2,0%
05	Special Projects, Endogovernamental and Structural	30,4%	26,3%	29,0%	28,6%
06	Other Activities (Technical Studies and Disclosure)	1,2%	1,0%	1,0%	1,0%
07	Administrative expenses	3,3%	4,0%	4,0%	3,8%
	TOTAL:	**100%**	**100%**	**100%**	**100%**

As for the number of research projects included in the universal demand (independent-inducing themes), gradual growth in submission of these during the quadrennium, and even noting a reduction in the hiring of the projects in the year 2009, the remaining year's recovery was reaching maximum hiring 750 projects in 2011. These numbers detailed in table 3.

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Table 3: Universal research projects submitted and hired (Authors, 2012)

UNIVERSAL EDITAL	SUBMITTED QUANTITY	% SUBMITTED GROWING	HIRED QUANTITY	% HIRED QUANTITY
2008	1.436	-	737	-
2009	1.546	7,6%	703	-4,6%
2010	1.799	16,3%	720	2,4%
2011	1.866	3,7%	750	4,1%
	TOTAL: 6.647		TOTAL: 2.910	

As the number of research projects included in the induced demand (with induction of subjects by State organs), the growth of the submissions of the other years from the year of 2009 was significant, as shown in table 4. The data from 2008 and the quantities contracted for other years were not disclosed in the reports consulted.

Table 4: Submitting of Inducted Research Projects (Authors, 2012)

INDUCTED EDITAL	SUBMITTED QUANTITY	% GROWING
2009	1.610	-
2010	4.143	157,3%
2011	3.173	-23,4%
	TOTAL: 8.926	

As the training of researchers in the quadrennium to FAPEMIG offered 4,608 shares the scientific initiation within the school through the BIC Jr, 12.013 dimensions to scientific initiation within the undergraduate program PIBIC, 2.704 units in mastering, 1.862 in doctorate, 921 in post-doctorate, 102 at 430 and a visiting scholar program on technological development, totaling 22.640 quotas directed the training of researchers. The distribution of these shares and the percentage growth rates compared to the previous year are detailed in table 5 below.

Table 5: Shares of financial assistance for training of researchers (Authors, 2012)

	2008	2009	% GROWING	2010	% GROWING	2011	% GROWING	TOTAL
BIC JR	819	1.133	38,3%	1.273	12,3%	1.383	8,6%	**4.608**
PIBIC	2.510	2.944	17,2%	3.064	4,0%	3.495	14,0%	**12.013**
MASTERING	608	645	6,0%	675	4,6%	776	14,9%	**2.704**
DOUTORATE	429	436	1,6%	453	3,9%	544	20,0%	**1.862**
POST-DOCTORATE	347	288	-17%	222	22,9%	64	-71,1%	**921**
RESEARCHER VISITOR	30	18	-40%	26	44,4%	28	7,69%	**102**
TECHNOLOGICAL DEVELOPEMENT	93	125	34,41%	112	10,4%	100	-10,7%	**430**
TOTAL:	6.844	7.598		7.835		8.401		**22.640**

As the number of higher education institutions benefited from mining shares made available the scientific initiation programs, PIBIC program directed graduation contemplated more institutions that the BIC program Jr which is targeted to high school. Already the quotas

directed the graduate (*stricto-senso*), the master of most institutions that encompassed the doctorate as details the table 6 below.

Table 6: Institutions benefited by financial aid quotas (Authors, 2012)

BENEFITED INSTITUTIONS	2008	2009	% GROWING	2010	% GROWING	2011	% GROWING
BIC JR	30	35	16,6%	42	20,0%	43	2,3%
PIBIC	60	65	8,3%	71	9,2%	76	7,0%
MASTERING	32	34	6,2%	35	2,9%	35	0,0%
DOCTORATE	13	16	23,0%	17	6,2%	18	5,8%

As for the support of scientific events in the quadrennium, the Foundation has promoted 1016 events, and provided participation in 3420 events, 1210 collectively, 1145 individually in international events and 1065 individually in Brazilian events. The following table 7 details these numbers.

Table 7: Support the organization of and participation in scientific events (Authors, 2012)

ORGANIZATION AND PARTICIPATION IN EVENTS	2008	2009	% GROWING	2010	% GROWING	2011	% GROWING	TOTAL
Organization	234	236	0,8%	238	0,8%	308	29,4%	**1016**
Group Participation	246	287	16,6%	337	17,4%	340	0,8%	**1210**
Exterior Individual Part.	291	230	-20,9%	303	31,7%	321	5,9%	**1145**
Individual Brazil Part.	269	231	-14,1%	260	12,5%	305	17,3%	**1065**

As for the evaluation of projects undertaken in the quadrennium, 5504 57.41% evaluated projects were recommended, 36.35% conditioners and 6.23% rejected. Points out that in the year 2008 the project evaluation Committee was not yet established, what justifies the absence of data in that year. The numbers of reviews are detailed in table 8 below.

Table 8: Evaluation of projects (Authors, 2012)

YEAR	RECOMENDED	CONDICIONED	REJECTED	TOTAL
2009	341 (23,2%)	1015 (69,1%)	113 (7,7%)	1469 (100%)
2010	1540 (75,3%)	434 (21,2%)	71 (3,5%)	2045 (100%)
2011	1279 (64,3%)	552 (27,7%)	159 (8,0%)	1990 (100%)
TOTAL	**3160**	**2001**	**343**	**5504**

In the quadrennium, 40,224 scientific products were developed, 18.30% of these are articles published in magazine, 40.58% Congress presentations, 2.36% 0.49%, book chapters published books, electronic publications, 1.09% 1.19% newspaper publications of dissemination, 18.01% 8.27% summaries published works published in annals of events, 2.95% and 6.75% doctoral theses dissertations. These numbers are detailed in table 9 below.

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Table 9: Scientific Products generated in finished projects (Authors, 2012)

PRODUCTS	2008	2009	% GROWING	2010	% GROWING	2011	% GROWING	TOTAL
Articles published in magazines	875	2.453	180,3%	2.144	-12,6%	1.890	-11,8%	**7.362**
Congress presentations	1.747	5.436	211,1%	4.620	-15,0%	4.520	-2,1%	**16.323**
Books' chapters	87	314	260,9%	270	-14,0%	280	3,7%	**951**
Published books	12	60	400,0%	61	1,6%	63	3,2%	**196**
Electronic publications	61	172	181,9%	88	-48,8%	156	77,2%	**477**
Publications in disclosure newspapers	69	124	79,7%	136	9,6%	111	-18,3%	**440**
Published Abstracts	675	2.467	265,4%	2.119	-14,1%	1.985	-6,3%	**7.246**
Works in events annals	327	1.017	211,0%	1.024	0,7%	960	-6,2%	**3.328**
Doctorate theses	137	408	197,8%	361	-11,5%	281	-22,1%	**1.187**
Mastering dissertations	320	897	180,3%	793	-11,5%	704	-11,2%	**2.714**
TOTAL:	**4.310**	**13.348**		**11.616**		**10.950**		**40.224**

As intellectual property protections, FAPEMIG provides approval of computer software, patents and trademarks (national and international) divided into two fronts: institutional and independent. In the quadrennium, 50 brands, patents and 176 41 computer software's have been developed through the support of the Foundation. These numbers are detailed in table 10 below:

Table 10: Intellectual property protections (Authors, 2012)

YEAR	TRADE MARKS	NATIONAL PATENTS		PATENTES INTERNACIONAIS		COMPUTER PROGRAMS
		INSTITUTIONAL	INDEPENDENT	INSTITUTIONAL	INDEPENDENT	
2008	7	17	4	6	0	3
2009	20	36	2	5	0	9
2010	13	38	1	19	0	8
2011	10	32	9	6	1	21
TOTAL:	**50**	**123**	**16**	**36**	**1**	**41**

6 CONCLUSION

According to the indicator developed by the Economist Intelligence Unit that analyzes 25 indicators in eight categories to form the ranking of the best places to invest, the State ranked 3 in General, being recognized as the third largest economy in Brazil, with positive indices of political stability, market growth, incentives for investment, provision of skilled labor and the promotion of research and development (EIU, 2011).

The prominent position reported, is worth much to the growing performance of FAPEMIG in actions development ST&I. The developing mining economy providing increase in worker income, increasing their purchasing power, causes an increase in consumption levels. The benefits of this growth by collecting more taxes, as well as the Foundation, because owning

the rights of retention 1% of the amount collected. This sequence of facts, allowed the Foundation to increase the resources invested, in 2011, to record fundraising.

The allocation of these resources during the quadrennium are mostly directed to research projects, provision of scholarships to aid research and training human resources, shares these priorities of the Foundation. Both priorities observed positive growth, based on the first year of the quadrennium compared to others.

On the research projects, it was noted the latent concern Foundation in follow projects funded, in order to verify that the desired results were achieved, justifying the expenditures made and providing subsidies for public managers Guide and refine the policies of science and technology.
It was noticed that the Foundation held concern to cover his actions between higher education institutions in the State, looking for spraying among them the quotas available to researchers, avoiding concentrate resources, seeking joint development of these institutions.

Aiming to disseminate and share the knowledge generated by the projects and researchers, the Foundation also listed in its priorities the promotion of scientific events, noting during the quadrennium increasing in number of events promoted. In this same framework, the Foundation through its researchers, concentrated efforts on the elaboration of scientific products, where in all of their natures, there was a plausible growth, highlighting the increase in publications of articles in scientific journals.

Not only looking for share, but also protect the knowledge produced, the Foundation created the intellectual property management, aiming at the advancement of intellectual property policy, recognizing the strategic importance for technological innovation in the State.

In summary, the results make it possible to infer that the management of FAPEMIG happens in a structured way, realizing that the funds obtained for the actions of ST&I follow normal levels in every year, showing that the Foundation has clear strategies regarding the determination of priorities, these in turn critical points for the scientific and technological development of Minas Gerais.

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THE 3/2 COUNTRY MARKET EVALUATION MODEL: INCLUSIVE EMERGING MARKET PARADIGM

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ABSTRACT
*The authors present a new country market selection model using a three filter/two phase approach to scanning: 1) a **macro filter** using mega aggregate country statistics (external environments) in the **rough cut phase** with **"broad fit"** company compatibilities (values, vision, goals, capabilities, management feel) and critical success factors (make or break issues); 2) an**EM filter** to consider and evaluate emerging country markets of potential, also in the **rough cut phase,** matching the EM factors **"broad fit"** with the critical success factors of the organization and 3) a **micro filter** using key success factors for the company and product, market structural factors, and industry/competition factors which produce a **"narrow fit"** in the **diamond cut phase** with the organization's objectives, strategies and resources. The emerging markets will be given full consideration in this model and factors selected will be chosen with the "fit" of the specific company, product, strategies, internal and external environments pertinent to the unique blend of variables in the industry/organization.*

Keywords:Country location model, Country product market, Emergingmarkets, External environment, Internal environment, International business expansion, Scanning, Selection of country markets, Strategic fit

1 INTRODUCTION

Locating a business outside of the country is commonplace today and makes sense if the company desires increased sales, larger profits, market share, competitive positioning and scales of economy (Gaston-Breton and Martin, 2011; Hajidimitriouand Georgiou, 2000; Sowinski, 2000). With the interdependence of the world and the ability to research global options more readily through the internet, company managers are expected to conduct environmental scanning of countries and markets and the best possible strategies to enter these markets as a typical part of their jobs. Even small and medium sized firms will be compelled to find cost savings and/or increased revenues and profits across national borders (Knight andCavusgil, 2004; Stray, Bridgewater and Murray, 2001). As Thomas Friedman (2005) says in his book, <u>The World is Flat,</u> that at the beginning of the 21st century, the world entered a new phase of globalization based on disruptive social, political and technological events ("flatteners"). In this flatter world,

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companies and individuals will be able to collaborate and compete more successfully, whatever their size and wherever they are. Those that fail to adapt will suffer.

2 LITERATURE REVIEW

2.1 Location of Country MarketsAnd Scanning Process

Locating the right country and market within that country is similar to finding the right mate in a dating scene. It can seem very difficult (almost like locating a needle in a haystack) unless you have a refining process for going through all the candidates. Many experts suggest a phased approach going from preliminary screening and in depth screening of identified candidates to selection (Cateora, 1995; Cavusgil, 1985; Johanson, 1997; Koch, 2001; Kumar, StamandJoachimsthaler, 1994; Root, 1994). In fact, BrouthersandNakos (2005) found the use of such models was tied to better performance; the small businesses which used a systematic model for screening were more successful in their international expansion than those who used ad hoc methods. The authors agree that following a systematic phased model is helpful but contend that the "preliminary screening" phase needs to be refined further. That is the purpose of this paper – to give insights and new direction to the scanning process of country market selection.

For a country market, managers need to conduct an analysis of the company's core values and competencies as well as the goals (desires) it has for global expansion and find country markets that match these. In the negotiation world, these are called "deal breakers" and companies know them as the "key success factors" or broad "fit. Internet "Scanning" helps to "weed" out the potential country market opportunities from the over 200 possible country market potentials in the world. The factors for "weeding" should be customized to the company. In addition to using multiple factors, it is important to decide which factors are of highest priority, and when does one apply the various filters. Successful companies learn there is a pattern to globalization and the processes of scanning, from rough cuts to diamond cuts, are formulated. Because of differences in industries, products and companies, the variables can and should be uniquely chosen. This paper recommends factor categories and steps in this "filtering" process, which will enhance the effectiveness of the scanning process.

2.2 Past Model Descriptions of Scanning ProcessAnd Limitations

Previous models show grouping of countries approaches based on similarities or market potential. The models which use similarities help the managers select countries by their similarities on variables in the external environment, primarily on social, economic and political indicators (Cavusgil, Kiyak and Yeniyurt, 2004; Huszagh, Fox and Day, 1985; Samli, 1977). Models ranking market potential use aggregate market potential and overall attractiveness variables such as size, growth, competition, import demand of products or changes in import shares, economic development and ease of access (Armstrong, 1970; Conners, 1960; Dickensheets, 1963; Green andAllaway, 1985; Lindberg, 1982; Samli, 1977).

Although the grouping models have been criticized for their over-reliance on broad based factors and not enough emphasis on product specific factors, they can help to narrow the field of country choices (Douglas, 1971; Papadopoulos, 1983; Sakarya, Eckman and Hyllegard, 2007). The "rough cuts" are broad indicators and therefore are not sufficient alone for effective screening. The authors have added another phase of "diamond cuts" related directly to the product and

industry to overcome this criticism in their model. In addition, most grouping models do not include factors which truly estimate what emerging markets bring to the table (Anderson andStrandskov, 1998; BjoErkmanandEklund, 1991; Ellis, 2003; Sakarya et al., 2007; Sowinski, 2000). This limitation is addressed by the "rough cut" Filter II for emerging country selection.

3   THE 3/2 MODEL TO COUNTRY MARKET SELECTION

The authors recommend a three filter, two phase approach in their model to country market selection (scanning process) in order to get the maximum benefit of the current research and thinking. To start with, the analysts should conduct simultaneous selections of countries using the traditional aggregate variables analysis as Filter I, alongside the emerging countries analysis (Filter II). These broad based filters are the hammers of the "rough cut" phase. The final filter applied is micro-fit analysis (Filter III) and is the precision tool used in the "diamond cutting" phase. Please see Table 1 for the 3/2 Model.

The reason for the 2 broad parallel filters to be applied is to overcome some of the biases in the traditional mega analysis model used in the past and to allow a more full consideration of emerging country markets. These first two filters are part of the "rough cut" phase, meaning the company is looking at the "big picture" factors that will "make or break" the decision. These "must have" variables start the "rough cut" of companies in the playing field. Typically, companies start with 15-20 country markets. During the "rough cut" phase they narrow those down to 6-8 country markets. With simultaneous filtering of worldwide options versus emerging country options, the researcher will have countries that make the mega cut and the emerging market cut in their 6-8 country market refinement. Please see Table 1 for overview of phases.

3.1   Traditional mega Analysis Filter (I)

Traditional models include many mega statistics groupings in the arenas of economic, socio-cultural, technological and political factors. These factors are the basic tools of the "traditional mega analysis filter." Economic factors typically include GNP, GNP growth rate, size of market, economic development, inflation rate, stability of exchange rate and GDP. Socio-cultural variables could be demographics such as population, age, and income distribution, cultural practices, lifestyle, literacy rates and religious practices. Political factors looked at could be political stability, level of government control of business and sophistication of political environment including human rights and intellectual property rights.

Technological/infrastructural factors may be included as well, which look at the level of technology adoption, technology skills, communication systems and infrastructure such as access to markets which includes roads, shipping and air transportation, and availability of water and electricity. Also included in this filter are the synergies ("broad fit") with the core elements of the organization – do the vision, values and goals of the firm mesh with the market? Will the market be big enough to fulfill the goals of the organization? Are managers committed to enter the market and feel they are ready for new market entry? From this "traditional mega analysis filter" the researchers are able to glean the "best potential mega candidates". There should be about 6-10 traditional countries to begin the scanning process and the filter should narrow the choices to 3 or 4. Table 2 shows the "traditional mega analysis filter" elaboration of factors.

3.2 Emerging Market Analysis Filter (II)

When evaluating markets, it is important not to overlook a candidate based on the general traditional aggregate categories usually applied to country analysis such as "indicators of wealth", "size", "growth", "competition" and "ease of access" or indirect factors of market potential using "economic development", "internal stability", and "cohesion" factors, all of which tend to favor larger developed countries since they are bigger, more stable and less risky. Although mega statistics used in traditional models are valuable in assessing and comparing countries overall, these factors measure a country at a point of time. They often do not take into consideration how the population is expected to grow in the future but rather measure static or past info such as "GNP per capita", "GNP levels" and "balance of payments trends" as market potential (Arnold andQuelch, 1998; Cavusgil et al., 2004; Sowinski, 2000; Stobaugh, 1969).

Making the selection of criteria geared to the goal of "growth and expansion" may lead to criteria which better assess the opportunities of the "emerging market" countries. Intuitively and statistically, experts see that many developed countries are slowing in their growth and economies, becoming saturated and have highly competitive market structures. In contrast, emerging markets are highly attractive due to their increasing disposable incomes, large populations of young consumers and economic liberalization (Alexander and de Lira e Silva, 2002; Reda, 1998; Sowinski, 2000).

The variables which are more conducive to emerging markets proposed include "long-term market potential", "culture", "competitive strength of the industry", and "customer receptiveness to the products of the foreign industry and its country of origin" (EvanschitzkyandWaggenheim, 2006, p. 79; Sakarya et al., 2007, p. 215; Samli, 1977, p. 49). In their research, Yeniyurt and Townsend (2003) showed that the variable of "culture" was significant in new product acceptance while Kogutand Singh (1988) found "culture" to influence entry mode selection. The variable "psychic distance" was utilized by Brewer (2007) in his model. Sherrif, Brewer andLusch (2010) show that "cultural distance" has a direct impact on the level of exports.

Also Cavusgil (1997) developed a "market potential index" for emerging markets using 13 different economic, social and political variables whereas Arnold and Quelch (1998) suggest firms find their own ways to predict long term market potential in emerging markets. Table 3 shows these types of factor comparisons for the Emerging Markets Analysis Filter (Filter II).The potential risk may be greater for emerging markets but the potential gain is also higher, like picking the "long shots" in horse racing. Using the "emerging market analysis" filter, the 3-4 "Best Potential EM Candidates" emerge from the original playing field of 6-10 emerging country markets. Then from these two rough cut filters of "mega analysis" and "emerging markets", the company chooses the top candidates, which are combined as the "Best Potential Candidates.

3.3 Micro Fit Analysis Filter (III)

After the simultaneous rough cut filters are applied, a more "micro approach" filter (Filter III), which is very specific to the company's strengths and strategies as well as product/industry, should be conducted to evaluate the weeded down potentials. Normally this filter chisels the candidates down to 3-4 options. These would be more detailed demand variables such as Burger King's "growth in the shopping malls" and competitive forces analysis such as "franchisees with experience and capital." These are now going from "rough" to the "diamond" cut. What areas of

"fit", "core competencies" and "key success factors" are needed to be effective in the country market for their particular mix of products?

In addition, this filter needs to consider the most effective potential entry mode. In the case of Burger King, they have narrowed down the choice to franchising. In addition, researchers have shown the importance of integrating decisions with research factors. Fit does matter. Strategies in marketing and manufacturing have a significant impact on selecting the right location overseas (Caneland Das, 2002); goals of the firm influence international site selection decisions (Hajidimitriouand Georgiou, 2000); market orientation is tied to international market selection (He and Wei, 2011). Table 4 illustrates the categories of factors and fit variables to be integrated during the "micro fit analysis" filtering.

4   SCANNING PHASES

The 3/2 Country Market Evaluation Model has 2 scanning phases: 1) rough cuts phase and 2) diamond cuts phase. These "macro" and "micro" phase approaches to scanning are supported in the literature (Gaston-Breton and Martin, 2011;Westhead, Wright andUcbasaran, 2002).

4.1   Rough Cuts Phase

Companies want to assess the country markets they are selecting, making sure their minimum requirements are met. These "rough cut" criteria are the basis of the scanning process. For example, Burger King uses the criteria of "large populations (especially of young people), high consumption of beef, availability of capital to franchisees for growth, a safe pro-business environment, growth in shopping centers, and availability of a potential franchisee with experience and resources" to narrow down its country markets choices (Daniels et al.,2013, p. 472).

As you can see, these factors can be categorized into two phases, including broad external environmental factors encompassing socio-cultural (i.e. demographics: population size, age; lifestyle: eating habits), economic (i.e. availability of capital), and political (i.e. safe and pro-business environment) variables and more micro factors, such as "growth in shopping centers" and "potential franchisee with experience and resources". The broad variables are what constitute "rough cuts" and should be the "must haves" for any company. The "fit" here is about the "core values" with the broad based analysis. The "rough cuts" phase typically narrows down the field to 3-4 mega candidates and 3-4 emerging market candidates, thus totally 6-8 in number. Please refer to Table 1 for the pictorial model of the "rough cuts" phase.

4.2   Diamond Cuts Phase

The authors recommend that the company think about the best market entry mode for their company during the diamond cutting phase, as this choice will often impact on which micro-variables are significant. As in the case of Burger King, they have chosen "franchising" as their preferred mode of entry and they are interested in researching the micro-variables of "resources and experience of the franchisees" during this "diamond cutting" phase in their scanning process. Andersen andBuvik (2002) show in their research a significant relationship between mode of entry and the selection of market partners. This is also where the company's orientation to international business,their past experiences globally, the stage of internationalization, the company's core success factors (KinkelandErceg, 2004; Knight andCavusgil, 2004; Westhead,

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Wright, Ucbasevanand Martin, 2001) and even the basis of their assessment (are they looking at risk vs. benefit evaluation or methods comparing cost vs. marketing control) are internal factors which impact the decision of a country market and the entry mode chosen (Chen andMesner, 2011; ErramilliandRao, 1993) External factors to assess include country market potential for a particular product, the strategic significance of the market (i.e. competitors/partners there, important resources there) and anticipated overseas market risks, industry and company specific information, supporting industries' level of development as well as market barriers such as tariff barriers and government regulations related to product, distribution access, industry feasibility, and market growth rate (Cavusgil, 1985; Koch, 2001; Rahman, 2003; Stray, Bridgewater and Murray, 2001; Swoboda, Schwartz andHalsig, 2007; Whitelock, 2004). As these variables are applied, a strategic "fit" is found between the product mix, country market environment and the company, thus allowing the best country markets to emerge.

4.3 In Depth Screening and Final Selection
Thus the scanning phase is completed (the object of this model) and the more detailed work on analyzing these "best overall candidate" markets through personal networking, in country visits and more expensive (primary data) collection of company/competition/partners and/or customers/market research information begins. This is typically what the experts call "in depth screening." During this stage, companies narrow down the search from 3-4 country markets to 1 particular country market, which they then select as their targeted country, called "final selection". This completes the overall selection of country markets.

5 CONCLUSIONS
This model is unique to the literature since it looks at "rough cut" compatibilities of the company with the aggregate data on country markets, focuses on evaluating opportunities of more risky emerging markets (outside the context of mega statistics) which most models do not fully include, and then pinpoints analysis of synergies between the company (its objectives, policies, strategies, orientation, experiences, resources) and its market on external environmental factors such as the market potential (i.e. consumer demand financially measured in sales, revenues, profit), product/industry factors (i.e. partnerships/alliances, suppliers, competitive environment) and structural barriers to particular product/market entry (i.e. governmental, tariff, legal, political, distribution, infrastructure, business practices).

The array of variables to study can be overwhelming for any company, but it pays to be both systematic and integrative in the scanning process for country market selection as it is a significant decision. Each company has a unique set of capabilities, values and goals. Their products are diverse as well as their strategies and resources. Each country has a unique set of variables in its own environment in general and specific to a particular industry/product. The industry itself has its own characteristics and key success variables. These factors need to be brought together in a model which can be molded to the situation.

The 3/2 model presented in this paper builds on the past models of country market selection while adding unique "fit" components and gives firms the latitude to pick the variables that best match them. It is unique because it offers the firm an opportunity to take a rough cut look at traditional countries and emerging countries as separate sets.

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TABLE 1. THREE FILTER/TWO PHASE MODEL FOR COUNTRY MARKET SELECTION – OVERVIEW OF SCANNING

FILTERS   PHASES

Traditional Mega Analysis Filter (I)   +   Emerging Market Analysis Filter (II) ROUGH CUTS

General   Big   EM   General
External   Picture   External   Company
Environment   Broad FIT   Internal   Environment Broad FIT Internal
                           Environment   Environment

BEST POTENTIAL MEGA CANDIDATES   +   BEST POTENTIAL EM CANDIDATES

Micro Fit Analysis Filter (III)   DIAMOND CUTS

Detailed   Detailed
Company's   Market's
              Narrow FIT
Internal   External   BEST   OVERALL
Environment   Environment   CANDIDATES

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TABLE 2. THE THREE FILTER/TWO PHASE MODEL TO COUNTRY MARKET SELECTION –FILTER I ROUGH CUT PHASE ELABORATION

Traditional Mega Analysis Filter (I)   Phase

Political   **Big Picture Company Capabilities**   ROUGH

    Gov'tl control level   Political stability and safety   Top 4 Critical Success Factors (Make or Break)

    Human rights   Pro-business environment   Commitment of Top Management   CUTS

    Intellectual prop.rights   Tariff & non-tariff barriers   Core competencies

Economic

    Balance of trade   GNP growth rate   Goals

Broad Fit   Values

    Economic Dev't level   Import levels   Vision

    Exchange rates   Income distribution

    GNP   Inflation rate

    Size of market

Socio-cultural

    Age   Lifestyle

    Cultural practices   Literacy

    Educational level   Population

    Family size   Religious practices

Technological/Infrastructure

    Communication systems   Technology adoption

Ease of access   Technology infrastructure

    Internet Use   Technology skills

BEST POTENTIAL MEGA CANDIDATES

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TABLE 3. THE THREE FILTER/TWO PHASE MODEL TO COUNTRY MARKET SELECTION –FILTER II ROUGH CUT PHASE ELABORATION

Emerging Market Analysis Filter   (II)   Phase

Long Term Market Potential   ROUGH

GDP/capita with adjustment for purchasing power parity   CUTS

Current population

Future population

Market potential index

Culture

Cultural distance – including dimensions such as uncertainty avoidance, individualism,
          masculine/feminine and time orientation

Psychic distance

Competitive Strength of Industry

Protection of local industry

Rivalry of industry within country

Size of industry within the country

Customer Product Receptiveness

Existing product awareness

Product demand

Surrogate/Related product/industry size

Survey of product receptiveness

          BEST POTENTIAL EM CANDIDATES

TABLE 4. THE THREE FILTER/TWO PHASE MODEL TO COUNTRY MARKET SELECTION –FILTER III DIAMOND CUT PHASE ELABORATION

Micro Fit Analysis Filter (III) PHASE

Detailed Company's Internal Environment   **Detailed Market's External Environment**

Company Objectives   Industry Competitive Factors
Industry feasibility

Significance of market   DIAMOND
                                                CUT
Suppliers, Partners, Competitors

Narrow Fit

Co. Strategies
Entry Mode   **Product Market Potential**
Product Adaptation   Consumer demand
Product Mix   **Cost/Profit of Market**
Co. Resources   **Structure of Market**
Company Orientation/Experiences/   Distribution of Product
Detailed Success Factors   Barriers to Product (Legal, Regulatory)
Business Practices
Infrastructure

BEST OVERALL CANDIDATES

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LEGAL REGULATION OF THE SPECIAL ECONOMIC ZONESIN RUSSIA

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ABSTRACT
The author in this work examines the current issues of development the special economic zones in Russia. The Federal law on Special Economic Zones in the Russian Federation, adopted on 22 of July, 2005, has become a firm basis for the establishment of public-private partnership in the country, promoted the investments in the economy, helped improving scientific and technological potential of the Russian regions. While being not perfect, the Law has been changed a lot since the year 2005, given the characteristics of the evolving market economy and the requirements of business entities, by improving the tax, administrative and customs systems.

Keywords: *Administrative regime, Industrial zones, Innovative economy, Investments, Legal regulation, Public-private partnership, Special economic zones, Taxes, Tourism*

1   INTRODUCTION

The current stage of development of the market economy in Russia is characterized by a modernization, among the factors of which there are the transition to innovative, improving scientific and technological potential and investment attractiveness. The latter, in particular, is possible in case of public policies aimed at creating an enabling environment for investments, protection of the domestic market and the competitiveness of domestic products. The stimulation of development of the national economy is impossible without the use of conventional and proven tools: concessional lending, taxation, government guarantees for external financing of production, providing a certain "package" of benefits and privileges to investors, government assistance in promoting Russian products to foreign markets. The mentioned above is the main tool of the special economic zones' system.

The mechanism of creation and functioning of the first special economic zones in Russia got its legal regulation in the 2005 federal law "On special economic zones in the Russian Federation» № 116-FZ. Although that law "gave life" to special economic zones in Russia, but the whole concept was not suggested. In this regard, numerous changes and additions to this law were subsequently made. The last amendments to this law made in the year 2012 took into account the positive experience of the existence of economic zones abroad, adapted to the realities of the Russian economy and the legal system.

2   TYPES OF SPECIAL ECONOMIC ZONES IN RUSSIA

There are four types of special economic zones in Russia:

- industrial production special economic zones;
- technology innovative special economic zones;
- tourism and recreational special economic zones;
- port special economic zones.

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The activities that residents can be engaged in the zone - that is the basis for the delineation of special zones by types. The kind of specific activities that the special economic zones residents are able to carry out in their territory depend on the socio-economic situation in the Russian Federation and the municipality, within which a special economic zone is supposed to be created, the strategy of socio-economic development, characterization and activity of the potential residents of the zone. In addition, Article 2 of the mentioned law allows the special economic zones of one or different types to join in clusters. As supposed, it will promote the development of manufacturing industries, high-tech industries, tourism, health resort industry, port and transport infrastructure, technology development and commercialization of their results and the production of new products.

In the context of the above, we note that in **the industrial production special economic zones** only industrial-production activity is permitted to perform, that is, the production and processing of goods (products) and their implementation, as well as the activities of logistics. The specific form of industrial and production activities, which will be made by residents of the zone should be determined by the subject of the Agreement on industrial and manufacturing activities, which is concluded between a resident of the zone and the Ministry of Economic Development of the Russian Federation. Currently, there are 4 areas of industrial type ("Alabuga", "Lipetsk", "Togliatti", "Pskov") located in the major industrial regions of the country. More than 60 residents, both Russian and foreign organizations, are registered on these territories. In accordance with Article 9 of the Federal Law only a commercial organization that makes capital investments in the amount of not less than 120 million rubles that is approximately 3 million euro (excluding intangible assets) can be the resident of industrial-production zones. A the same time the resident of industrial-production special economic zone is obligated to make capital investments in the amount of not less than 40 million rubles (about 1 million euro) (excluding intangible assets) during three years from the date of conclusion of the agreement on the implementation of activities. At the same time, before the year 2009 the minimum investment threshold for potential residents of the zones was higher - more than 10 million euro. Taking part in the work of the special Committee to draft amendments to the Law we repeatedly pointed out the need of lowering the threshold for investment. We believe that the reduction of the amount of investment required for the residents of industrial production special economic zones increases the investment appeal of areas, thus creating the possibility of joining in the special economic zone of a much larger number of investors. Fortunately the Legislator took into account the recommendations and appropriate amendments have been made recently.

Technology innovative special economic zones are created to develop a fundamentally new technologies, materials and products, the pilot production of small quantities of goods. This zone type is mainly based around the major research and education centers with a rich scientific tradition and recognized research schools, which opens up great opportunities for innovative business development, manufacturing high technology products and display it on the Russian and international markets. In four special economic zones of this type ("St. Petersburg", "Tomsk", "Zelenograd", "Dubna") more than 200 residents are registered. For example, the special economic zone "Tomsk", which is one of the first created special economic zone in Russia in 2005, successfully attracts investment into the region through the development of the following areas: IT and electronics, medicine, biotechnology, new materials and nanotechnology. In the special economic zone in St. Petersburg there are 33 investors implementing projects to develop software products and telecommunications equipment, digital measuring systems and information security, development and production

of solutions for the energy industry facilities, organization of laboratories and pharmaceutical facilities for the development, production and sale of drugs. In 2011, investments made by residents of the special economic zone "St. Petersburg" was 387.9 million rubles (about 10 million euro), which is almost 2 times higher than the previous year. Unlike the industrial production zones in the technology innovative zones as residents may be both commercial organizations and sole traders, who are registered within the zone and have signed an agreement with the authorities of the special economic zone.

Tourist and recreational special economic zones established for the implementation of tourist-recreational activities. Currently, there are seven tourist and recreation areas in Russia, including "Russian Island" in the Primorsky Territory and the North Caucasian tourist cluster created in the development of these regions, as well as the APEC summit in 2012and the Olympic games in 2014.

The fourth type of zones -**the port-logistics special economic zones**-established for the implementation of port activity and (or) the construction, rehabilitation and maintenance of infrastructure seaport, river port and airport. Russia has created two zones of this type ("Ulyanovsk" and "Soviet harbor"). Being in close to the main transportation routes, port and logistics SEZs could become a platform for the organization of shipbuilding and repair activities, the provision of logistics services, as well as a base for new routes. The Federal Law stipulates the following conditions for the area residents. If an agreement on the implementation of activities in the port special economic zone envisages the construction and reconstruction of infrastructure seaport, river port or airport, the port zone resident must make capital investments in the amount at least:
- four hundred million rubles -10 million euro- (excluding intangible assets) in the construction of infrastructure facilities seaport, river port and the airport, including the infrastructure of new sea port, river port and the airport, while a resident of the port special economic zone must make capital investments in the amount of not less than forty million rubles- 1 million euro- (excluding intangible assets) for three years from the date of conclusion of the agreement on the implementation of activities;
- hundred and twenty million rubles-3 million euro- (excluding intangible assets) for the reconstruction of infrastructure seaport, river port and the airport, while a resident of the port special economic zone must make capital investments in the amount of not less than forty million rubles-1 million euro-(excluding intangible assets) for three years from the date of conclusion of the agreement on the implementation of activities.

Due to the fact that on port special economic zones residents spreads the free customs zone, residents when concluding the agreement on the implementation of activities have to present to the customs authorities ensuring payment of customs duties and taxes, the amount of which may not be less than:
- thirty million rubles (750 thousand euro) for the storage of goods, wholesale trade, open trade in goods (including excise goods or minerals);
- ten million rubles(250 thousand euro) for the storage of goods, non-excisable goods, storage of goods, wholesale trade, stock trade;
- two and a half million rubles(62 and a half thousand euro) in the implementation of other port activities.

3 THE SYSTEM OF SPECIAL ECONOMIC ZONES' MANAGEMENT (THE ADMINISTRATIVE BODIES)

The successful functioning of special economic zones and the active involvement of investment into created on their territories projects depends primarily on effective transparent and harmonious system of administration of special economic zones and the interaction between the federal center, regions and business –structures. The global experience of the special zones suggests that without continued state support and coordination, such zones can not develop. Many countries have established special government agencies working on development zones. For example, in China, the highest administrative body of the free economic zones is the Office of the State Council of the PRC for free economic zones, which develops basic political attitudes and monitors their implementation, conducts and oversees other agencies in terms of their activity in the special economic zones.

Since the first appearance of special zones in Russia and up to2009 there was a multi level management (control) system of the special economic zones:
- Ministry of Economic Development of Russia performed the functions of normative legal regulation and public policy in the development of special economic zones;
- The Federal Agency for Management of Special Economic Zones and its territorial divisions carried out the direct control of the zones . Note that the Agency was created in 2005 to provide services and the implementation of law enforcement functions in the special economic zones, as well as monitoring the implementation of the agreement on certain types of business;
- joint stock company "Special Economic Zones" was engaged in construction of infrastructure facilities. It was created in 2006 as a state customer of special economic zones infrastructure construction;
- executive authorities of the regions of Russia.

However, experience of the created special zones in Russia proved the need for change of the complicated functional system, which was highly centralized and insufficiently flexible and didn't response to the needs of the residents of zones. In 2009, the Federal Agency for Management of Special Economic Zones was abolished and its functions were fully transferred to the Ministry of Economic Development.

Currently a two-level system of special economic zones control has been created. It is represented by the Ministry of economic development of Russia and the executive bodies of the regions of the Russian Federation (federal and regional levels) with the possibility of redistribution of powers between them. Moreover from the January 1, 2012 some functions of the zones control can be transferred to private management companies. The management company can be: an open joint stock company, one hundred percent of the shares belong to the Russian Federation and which is created in order to implement the agreements on the establishment of special economic zones; business entity, created with the participation of the open joint stock company for those purposes; any other business entity that has concluded an agreement with the Ministry of economic development of Russia to manage a special economic zone.

The involvement of management companies to the control process is due to a general trend of reducing a government involvement in certain areas of the economy, where the mechanisms of functioning has been already established, and where the processes of self-regulation of business is possible. Furthermore, the introduction of this measure gives meaning to the idea

of public-private partnership in Russia and foreign investment in special economic zones and in the Russian economy as a whole. Despite the fact that the term "public-private partnership" has no legal definition at the federal level, it is widely used both in the regional legislation, and in the concept of individual sectors of the economy. In addition, the strategies and concepts of social and economic development of Russia until 2020, public-private partnership is indicated as one of the most promising tools to stimulate the development of the economy. In theory, there are three known models of public-private partnerships:

1. Operating model - the investor takes on the responsibility for operation of the facility owned by the State, and for this service, and the state-owner of the facility - is responsible for the implementation of the social function of the consumers (residents of special economic zones), which pay for the service. This form is focused on the preservation of the state ownership of production facilities, and opportunities to influence the policy decisions taken within the zone. This model is characterized by the use of contract forms, lease agreements.

2. Concession model - the investor carries out works or supply certain services to end customers directly and get the right to finance the expenses of the board for the use of the object, with the responsibility for public functions is an entrepreneur (concessionaire), and for the government (grantor) hold control functions. Such a scheme is most common in the Russian and international practice, as it allows implement major social projects without significant budget financing.

3. Cooperation model - public functions are assigned to the joint venture that created the public partner with one or more private sector companies. Such a model is the most appropriate in term of the development of special zones in Russia, innovative and high-tech projects.

In this context, the legislator proposes the creation of asset management companies, which are empowered to engage residents in the special economic zones for infrastructure, including the funds to attract investors, and operation of infrastructure, project development planning area and other duties as may be required agreement on the management of the zones. The list of functions of the management company is public. The Management Company shall be responsible for the effective management of the property complex ,improved service of zones residents and participate in the future development of engineering infrastructure.

4   TAXATION IN SPECIAL ECONOMIC ZONES IN RUSSIA

The legal regime of business activity in the special economic zones is expressed in providing benefits and appropriate safeguards to the residents of economic zones, such as special land tenure, the customs, administrative and tax regimes. Special attention would be paid to the taxation in the special economic zones. Special tax mode of residents of the zones is to provide a more favorable tax treatment in the form of tax exemptions, tax breaks and other benefits that will be discussed later, without any obligation on the part of tax payers on the proper use of released working capital. According to the Tax Code of the Russian Federation, the tax system in Russia is composed of federal, state and local taxes. Accordingly, a resident of a zone pays the tax to the budget, depending on the type of its activities and which kind of taxes a specific payment is referred to.

For example, corporate income tax is a **federal tax**, that is, its size is the same for all the regions of Russia. Although the tax is part of the mandatory payments of federal level, it is enlisted to all types of budgets of the Russian Federation. As a result - the legislative (representative) bodies of the regions of Russia have the right to reduce the income tax rate to

the amounts payable to the regional budgets. In accordance with paragraph 1 of Article 284 of the Tax Code of Russia the current rate for all taxpayers of this tax is 20%; 18% of them go to the regional budget and 2% - to the federal budget. For residents of the special economic zones lower taxes may be set by the regional Law, in part which has to be included to the budget of the region of Russia. For example, in industrial production zone "Alabuga" income tax is 15.5% (instead of 20 %). The residents of technology innovative zones are exempt from this tax from the year 2012 to 2018.

Property tax is a **regional tax,** which is established by the laws of the regions of the Russian Federation. Currently, the residents of special economic zones are exempt from paying this tax for 10 years. Vehicle tax is also recognized as a regional tax, the payment of which the residents are also exempt.

Local taxes include, for example, land tax, the payment of which the special economic zones residents are also exempt. In the port zones tax rate of value added tax (VAT) instead of 18% for residents is 0% for 49 years.

5   CONCLUSION

In conclusion, we would say that in Russia all the conditions for the implementation of investment projects are set: the tax breaks, free customs zone regime, simplified access to infrastructure, preferential rates of land rent, the unique atmosphere of cooperation and partnership between the residents of the special economic zones.

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TESTING STABILITY OF REMITTANCE INFLOWS IN SERBIA

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ABSTRACT

Remittances are an important and stable source of foreign funds for many developing countries. In the period before the global crisis, these countries faced a large inflow of foreign investments and banking capital, but the crisis has interrupted these flows, and even led to their withdrawal. On the other hand, data suggest that remittances are persistent at high levels, and had even recorded growth. Therefore, this trend led to our interest to examine the best features and possibility for efficient use of remittance inflows. Based on econometric analysis of the monthly data (using ARCH model) we test the volatility behavior of remittances (using as a proxy current transfer inflows data in Serbia). Findings show that current transfers (and therefore remittances) are a quite stable source of external financing on which economic authorities can mostly count on. Consequent appropriate policy support, which would stimulate savings and investments in capital and financial instruments, could result in positive effects on financial stability and economic growth not only in the short but in the medium and long term.

Keywords: Current Transfers, Remittances, Volatility

1   INTRODUCTION

In the period before the global crisis developing countries have faced significant inflows of foreign direct and portfolio investments and banking capital, but the crisis has stopped and reversed these trends. According to Bank for International Settlement banks from Western Europe have withdrawn from these countries more than seventy billions of US dollars during the ongoing and previous year. The second wave of the crisis, high indebtedness and permanent economic problems in many countries make investors and banks cautious in their new investments. Those circumstances pose serious obstacles to governments that are trying to recover the economies, attract foreign capital and finance previously accumulated debts in an environment of foreign funds scarcity and significant withdrawal of capital. Therefore, the inflows of remittances in developing countries, which remained at the high level even in the period of crisis, resulted in our interest to better investigate properties, possible usages and effects of these funds.

Remittances are the primary source of external finance for many developing countries (Chami et al., 2008; Ratha, 2009). According to economic literature and current events in developing countries, it is observed that remittances (and consequently current transfers) are, unlike other foreign inflows, characterized by significant stability (Chami, Hakura and Montiel, 2009; Ratha and Mohapatra, 2007). The benefits that a country can have from stable cash inflows are multiple as far as they focus on activities that contribute to economic growth and

development. Theoretically, channeling remittances into savings and investments can lead to long term GDP growth. Also, the fact that remittances reduce the volatility of GDP[1] and contribute to financial system development positively contributes to country's growth and development. Finally, these resources significantly contribute to the fight against poverty and inequality (Adams and Page, 2005; Gupta, Pattillo and Wagh, 2009).

In this paper, beyond theoretical and empirical data review, we present results of econometric analysis on stability of remittance flows by using current transfer inflows data to Serbia. With this analysis, we aim to remind how important remittance inflows are for developing countries and Serbia, how significant is their precise monitoring and recording as well as their channeling not only in consumption, but also in various investment alternatives that could provide long-term benefits to the local economy.

2   DEFINITION AND REMITTANCE FLOWS

Remittances from abroad present a significant component of the total foreign currency inflow in developing countries. Migrant remittances according to the World Bank include three categories: workers' remittances, compensations of employees and migrants' transfers.[2] Because of the difficulty of recording of these flows and often incomplete data (given that a large part of remittances are transferred through informal channels), a great number of countries partly estimate the value of remittance inflows.

According to the recent estimates of the World Bank for year 2011 steady inflow of remittances almost uninterruptedly continues despite the financial and economic turmoil of global proportions in the recent past. Remittance flows on global level are estimated at USD 501 billion. The amount of remittances received in developing countries reached the level of USD 372 billion, which significantly surpasses the level of official aid and is nearly equal to inflows   of   FDI   into   these   countries (http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20648762~menuP K:34480~ pagePK:64257043~piPK:437376~theSitePK:4607,00.html). Officially recorded remittances in 2011 were approximately three times larger than official aid to developing countries. In the pre-crisis period of 1998–2007, on average, remittances were fifteen times higher than official transfers to recipient countries, eighteen times higher than official capital flows, more than twice the total private capital flows, thereby reaching 30% of the value of exports of the recipients (Barajas et al., 2010). The largest recipients of remittances in 2011 were India, China, Mexico and the Philippines. In many developing countries, the annual

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[1] Rao and Hassan (2012) prove that remittances influence economic growth through four main channels: the volatility of GDP, the rate of investments, financial sector development and the exchange rate. Doubts about the existence and impact of remittances on long-term growth and often conflicting findings result from the fact that long-term impact of remittances on growth is not direct but takes place through channels, which can operate in different directions and thus diminish or even nullify the individual effects. The first channel implies that remittances as a stable source of funding reduce fluctuations in GDP. Given the confirmed inverse relation between volatility of GDP and GDP growth, remittances favorably affect growth.

[2] Workers' remittances in the IMF's Balance of Payments Manual, 6th edition (IMF, 2010) are defined as current private transfers of migrant workers who are residents of the country in which they work. Recipients of these funds are in their country of origin. Residential status includes an abroad stay of one year or longer. For stays shorter than one year earned income in that period is classified under the item compensation of employees. Migrants' transfers represent net value of migrants' assets being transferred from one country to another at the time of migration for a period of at least one year.

inflow of remittances reached and even exceeded one-fifth of the GDP (Nepal 20%, Tonga 20%, Moldova 23%, Lesotho 29%, Tajikistan 31%) (http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20648762~menuP K:34480~pagePK:64257043~piPK:437376~theSitePK:4607,00.html; http://www.dbresearch .com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000291419/Moldova.PDF).

According to the World Bank, the Europe and Central Asia region received approximately USD 41 billion in 2011 in the form of remittances. In fact, Serbia is among the biggest recipients in the region right next to the large economies such as Russia, Ukraine and Romania (The World Bank, 2011). Total inflow of migrant remittances (workers' remittances, compensations of employees and migrants' transfers) in 2010 in Serbia was estimated by the World Bank at the level of around 13% of the GDP, while the subcategory of pure workers' remittances was estimated at 8.7% of the GDP by the National Bank of Serbia.[3]

It is important to note that the real size of remittance flows that are not registered through official channels or are transferred through informal channels in some countries is often considered to be significantly higher than estimates made by the side of relevant institutions. This fact only increases their importance as potential source of external financing of both consumption and investments in developing countries.

3 THE STABILITY OF REMITTANCE FLOWS
Remittances have proven to be one of the most stable sources of external financing for developing countries during the past few decades and the last global crisis. They are much less responsive to economic cycles and economic shocks than foreign direct investments and other private and official capital flows (Chami, Hakura and Montiel, 2009; Ratha and Mohapatra, 2007). In developing countries, these flows have decreased by only 5.5% in 2010 compared to 2009, in contrast to the decline in foreign direct investment by 40%, and private capital inflows and portfolio investments by as much as 46% over the same period (The World Bank, 2011). The low volatility of remittances potentially helps developing economies to avoid sudden reversals in the behavior of their key macroeconomic fundamentals and possible consequences of these shocks on the room for maneuver of monetary and fiscal policy and the overall welfare.

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[3] Foundation for the Advancement of Economics, based on the National Bank of Serbia's data.

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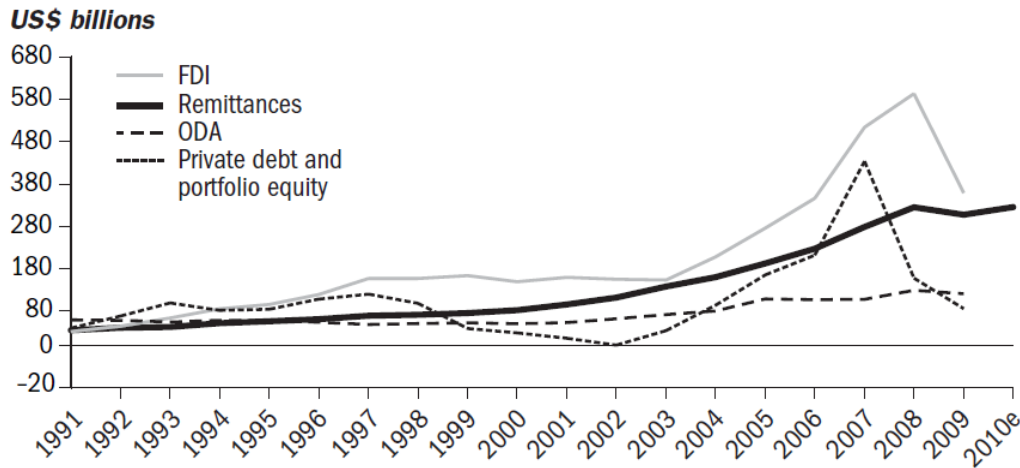
Chart 1: The stability of remittance flows compared to other sources of external financing in developing countries (The World Bank, 2011)

The degree of remittance flows' volatility depends on a variety of macroeconomic factors. Among them, the most important are fluctuations of production in the remitting and recipient country, changes in exchange rates, inflation, unemployment and socio-political environment. Stability of remittances consequently has impact on consumption patterns in the recipient country and the households' propensity to save. These parameters influence economic activity, primarily in the short and possibly medium term.

4   INFLOWS OF FOREIGN CAPITAL IN SERBIA

Serbia is one of the countries with emerging markets, which is a significant recipient of remittances in both absolute and relative terms - in comparison to the size of the GDP and other external inflows in form of foreign direct investment and development assistance.
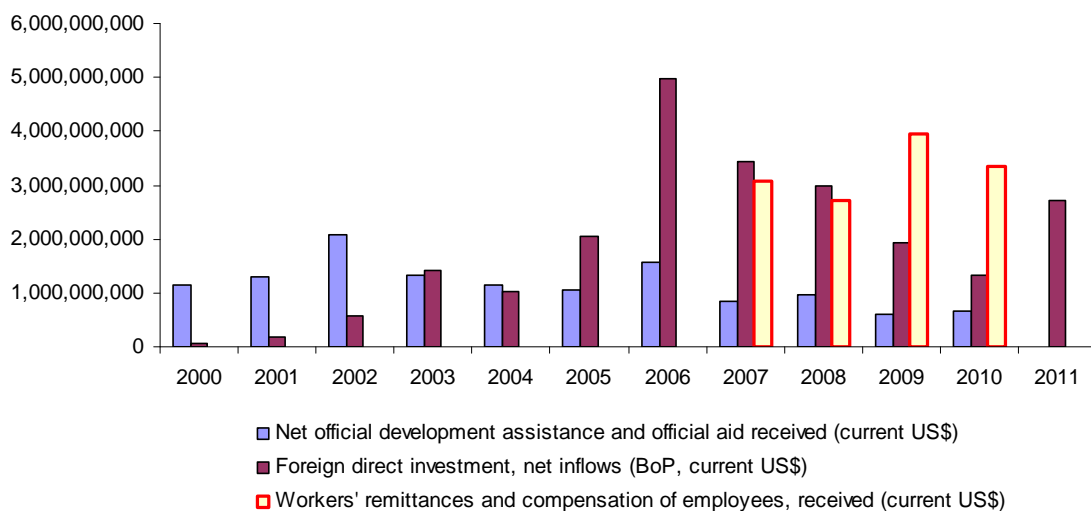
Chart 2: Inflows of remittances, FDI and development assistance to Serbia from 2000 to 2011 (Authors' prezentation based on the World Bank's data - World Development Indicators)

In Serbia, workers' remittances account for a large part of the total inflow of funds from abroad. According to the National Bank of Serbia's data from 2007 to 2011 the remittances' inflows have reached between 2.5 and 4 billions of U.S. dollars annually. Also, they represent a significant portion of the GDP (7.6% on average for 2007-2011 period) and cover nearly 40% of the trade deficit (average for 2007–2011 period).

Since remittances represent the largest financial inflows in Serbia, especially in the period during the global crisis, they are of great importance to the national economy. However, large variations in these flows could be a problem for policymakers. It is therefore of great significance to empirically test the level of stability of these flows in order to see whether they can be used as a stable source of external funding which is particularly crucial now when other inflows of foreign capital are scarce.

5 THE ANALYSIS OF REMITTANCE VOLATILITY BY USING RECEIPTS OF CURRENT TRANSFERS IN SERBIA – DATA DESCRIPTION, METHODOLOGY AND RESULTS

Remittances from abroad react to economic and social changes in both the remitting and recipient countries. Remittances usually increase in cases of some unforeseen circumstances (such as natural disasters, economic shocks, political instability, wars etc.), for the purpose of helping the population (and the economy) in danger. However, if the undesired events happen in the remitting country, the value of remittances can significantly decrease.

Such movement of remittances indicates the potential change of their volatility over time and its grouping into zones of low and high volatility. The periods of high volatility are followed by more peaceful periods and vice versa. For this reason, it is valid to test this hypothesis by using the Autoregressive Conditional Heteroskedasticity Model-ARCH, as suggested by Engle (1982). ARCH and GARCH (Generalized Autoregressive Conditional Heteroskedasticity-GARCH, Bollerslev (1986)) models are particularly suitable for the volatility analysis of economic variables.

ARCH model of order q can be presented in the following way:

$$y_t = \beta_1 + \beta_2 x_{2t} + \beta_3 x_{3t} + ... + u_t$$
$$u_t \sim N(0, \sigma_t^2)$$
$$\sigma_t^2 = \alpha_0 + \alpha_1 u_{t-1}^2 + \alpha_2 u_{t-2}^2 + ... + \alpha_q u_{t-q}^2$$

(1)

The initial series of data subjected to analysis depends on the series of explanatory variables x_t, which can even be the previous values of a dependent variable y_t. We use u_t to denote the residual series, that is – the standard errors of the model, and σ_t^2 to denote the time dependent residual variance. Here, α_0 is used to denote the minimum constant volatility, and α_1 to α_q, to denote the variance which depends on the squares of previous process $\{u_t\}$ values.

The presence of the ARCH effect points to the existence of heteroskedasticity, that is - the change in residuals' variance over time, which is then possible to model with the adequate form of ARCH (or GARCH) specification.

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Considering the fact that we have a consistent time series of remittance inflows since 2007[4], we have decided to analyse remittance volatility using the data on current transfer inflows, which are available for a much longer time period (based on internal data of the National Bank of Serbia, for the period from January 2001 till August 2012). Considering the fact that remittances make the biggest part of current transfers and that a higly correlated behaviour between these two series is evident (Chart 3, correlation coefficient of 0.9576), we believe that current transfers are a good proxy for the analysis of remittance movements in Serbia. So, the observed time series consists of 140 monthly observations[5].
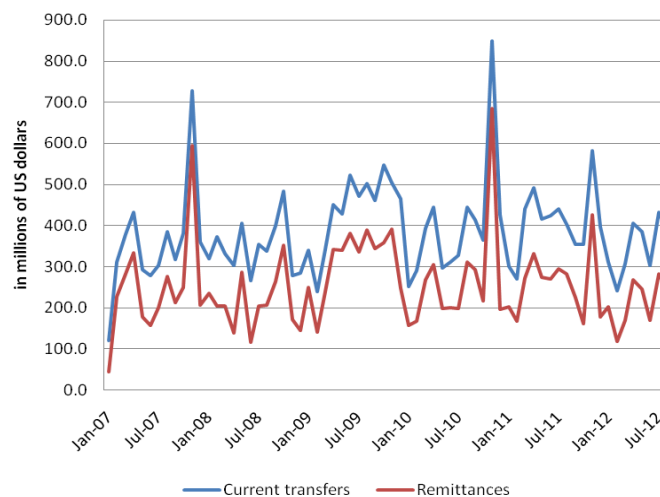
*Chart 3: Serbia: Receipts of Current Transfers and Remittances, Jan 2007 – Aug 2012
(National Bank of Serbia)*

The first step in the analysis is testing of the stationarity and linearity, which enables us to proceed with the further analysis of this time series.[6] Thus we primarily apply unit root tests.

Bearing in mind the exceptionally seasonal movement of remittances (increased inflows at the end of the year), and thus of current transfers too, the deseasonalization of data series was performed (by using Tramo/Seats method, Chart 4), followed by testing of the characteristics of seasonally–adjusted time series.

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[4] NBS changed the methodology of the Balance of payments in January 2008, when it harmonized the methodology with IMF's BOP Manual 5. The data are also revised for year 2007. Because of that, the remittance series before and after January 2007 are methodologically inconsistent.

[5] In the previous analysis we analyzed the volatility of remittance flows for the period February 2007 - August 2012 and got results that lead to the same conclusions (Jankovic and Gligoric, 2012)

[6] We performed the data analysis and modelling using Eviews 6 programme.

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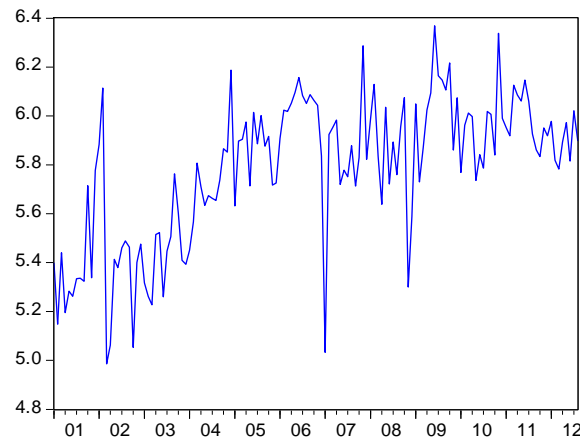
Chart 4: Seasonally-adjusted log series of current transfer inflows to Serbia, Jan 2001-Aug 2012 (Authors' calculations)

Seasonally-adjusted series of current transfer inflows to Serbia shows stationarity, which is supported by correlogram analysis and the unit root test (Augmented Dickey-Fuller Test).

After we confirmed that the series of current transfer inflows is stationary, we focused on specification of an adequate ARMA (p, q) model. ARMA (p, q) models show the linear dependence of the current values of some data series *y* on its previous values, as well as current and previous values of error *u,* which possesses the characteristics of the white noise process. ARMA (p, q) specification can be presented in the following way:

$$y_t = \phi_0 + \phi_1 y_{t-1} + \phi_2 y_{t-2} + ... + \phi_p + \theta_1 u_{t-1} + \theta_2 u_{t-2} + ... + \theta_q u_{t-q} + u_t$$

$$E(u_t) = 0; \quad E(u_t^2) = \sigma^2; \quad E(u_t u_s) = 0 \quad ,t \neq s$$

(2)

Non-standard observations can result in the biased estimation of the correlation structure of a series. Since the series of current transfer inflows is characterized by several non-standard observations we introduce three artificial variables: V1, V2 and V3 (V1 for January 2007 - The change of balance-of-payments methodology by NBS, which resulted in the data showing uncharacteristically low value of inflows in January; V2 for November 2008 - The beginning of the global economic crisis; V3 for February and March 2002 - The introduction of the euro and exchange of deutsche marks for new currency caused the increase of the value of transactions in exchange offices, which was methodologically recorded as the remittance inflow), and observe the correlation structure of the series devoid of the influence of structural breaks.

Table 1: Correlogram (Autocorrelation coefficients are statistically significant at the 5% significance level if they are outside the interval (±0.17), Authors' calculations)

lag	1	2	3	4	5	6	7	8	9	10	11	12
AC	0.49	0.47	0.38	0.35	0.30	0.28	0.22	0.26	0.19	0.12	0.17	0.06
PAC	0.49	0.31	0.11	0.08	0.03	0.04	-0.02	0.09	-0.01	-0.10	0.07	-0.09
lag	13	14	15	16	17	18	19	20	21	22	23	24
AC	0.11	0.20	0.18	0.14	0.19	0.17	0.24	0.16	0.10	0.09	0.03	-0.05
PAC	0.04	0.20	0.06	-0.06	0.07	0.04	0.08	-0.05	-0.10	-0.09	-0.09	-0.12

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More precisely, we observe the regression residuals of seasonally-adjusted current transfer series on the constant and the artificial variables: V1, V2 and V3. This is the way we model the series devoiding the influence of non-standard values.

After the influence of structural breaks is eliminated, the correlation on the first and a second lag becomes statistically significant (Table 1). It is modelled by including AR(1) and AR(2) components. So we choose ARMA(2,0) specification presented in Table 2 and in equation (3), whereas actual and estimated values are shown in Chart 5.

Table 2: Estimation of the equation of seasonally-adjusted current transfer values (V1=1 for January 2007 and 0 for other months, V2=1 for November 2008 and 0 for other months and V3= -1 for February and 1 for March 2002 and 0 for other months, Authors' calculations)

Variable	Coefficient	t-statistic
Constant	5.4894	62.60
Trend	0.0044	4.18
V1	-0.9015	-5.90
V2	-0.6285	-4.10
V3	-0.5494	-5.55
AR(1)	0.3369	4.05
AR(2)	0.3196	3.84
S=0.1676	Q(12)=10.97(0.36) JB=2.01(0.37)	SC=-0.5371

The following equation represents ARMA (2,0) model for seasonally-adjusted series of current transfer inflows in Serbia:

$$y_t = 5.4894 + 0.0044t + 0.3369y_{t-1} + 0.3196y_{t-2} - 0.9015V1 - 0.6285V2 - 0.5494V3 + u_t \qquad (3)$$
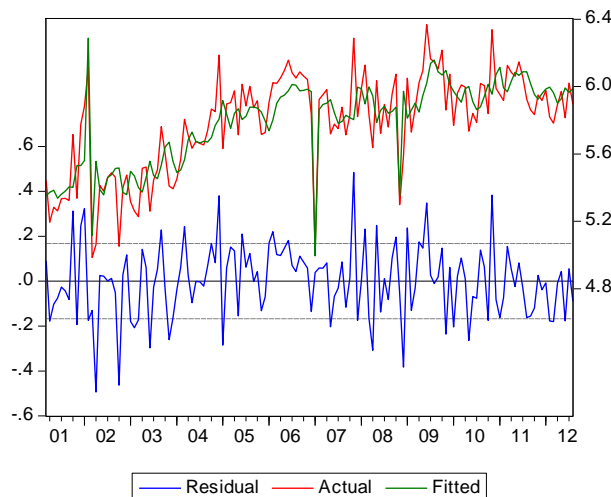
Chart 5: Current and estimated values of seasonally-adjusted current transfer series

Correlogram and Breusch-Godfrey Serial Correlation LM Test do not indicate the presence of a significant remaining autocorrelation. This is confirmed by the value of the product of the number of observations and the coefficient R^2, Obs*R-squared (13.81), which is smaller than

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the critical value of χ^2 square distribution with m=12 ($\cong \sqrt{T}$) at the significance level of 5% (21.03).

Normality analysis indicates that residuals do not deviate significantly from a normal distribution (Chart 6). The indicator of distribution kurtosis has a value of 3.58, whereas the skewness is closer to 0 and equals -0.05, which indicates a symmetric structure. The same conclusion on a normal residual distribution is reached by observing the value of Jarque-Bera statistics, which equals 2.01 (p=0.37).
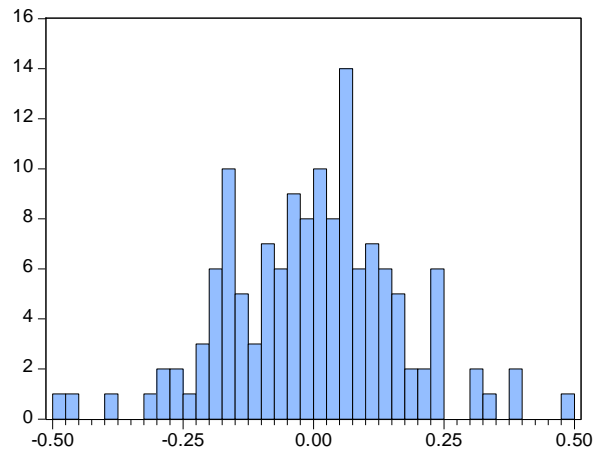
Chart 6: Histogram

Histogram and correlogram of residuals squared do not suggest the presence of ARCH effect, i.e. heteroskedasticity. Still, in order to check for the absence of heteroskedasticity, we also conduct the ARCH test, where we include one lag. The results of ARCH (1) test are shown in Table 3.

Table 3: The results of the ARCH test (Authors' calculations)

F-statistic	6.30E-05	Prob. F(1,136)	0.9937
Obs*R-squared	6.39E-05	Prob. χ^2	0.9936

The value of the product of the number of observations and the coefficient R^2, Obs*R-squared (6.39E-05) is smaller than the critical value of χ^2 distribution with m=12 ($\cong \sqrt{T}$) at the significance level of 5% (21.03). We conclude that there is no ARCH effect in the model's residual series.

We obtained the following equation (t-statistics in parenthesis):
$$\sigma_t^2 = \underset{(6.6123)}{0.026664} - \underset{(-0.0079)}{0.000548}\, u_{t-1}^2 \tag{4}$$

The absence of the ARCH effect is also confirmed by the obtained equation (4), which shows that there is no statistically significant influence of residuals from the previous period on the variance. The indicator of that is the extremely low value of t-statistics = -0.007937 (p-value = 0.9937) of coefficient α_1.

6 CONCLUSION

The absence of volatility, or rather the stability of remittance flows is considered to be their much valued characteristic, particularly in the period after the global crisis, when the external cash inflows to developing countries are scarce, and even start to decrease. Therefore, it has been our aim to empirically confirm the absence of significant volatility of remittances to Serbia, in order to be certain that it is reasonable to count on their stable inflow in the process of creating medium-term macroeconomic policies.

Findings based on the econometric data analysis of current transfers and remittances and their volatility show that they are a quite stable source of external financing that economic authorities can mostly count on and which can be used both, in the gradual stabilization of spending, that is already the case, and for the stimulation of new investment activities. As a result, that would have a positive effect on the overall growth of our economy.

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EDUCATION FOR SUCCESSFUL INTERCULTURAL COMMUNICATION AND CULTURAL INTELLIGENCE

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ABSTRACT
Intercultural intelligence is the capability to function effectively in culturally diverse settings and consists of different dimensions (metacognitive, cognitive, motivational and behavioural) which are correlated to effectiveness in global environment (cultural judgment and decision making, cultural adaptation and task performance in culturally diverse settings). The purpose of the article was to check the relationship between knowledge and experiences of intercultural communication and the score of cultural intelligence. The sample consists of 107 students from Faculty for commercial and business science Celje; they answered the questionnaire of education on Intercultural communication and the Cultural intelligence scale (Ang, Dyne and Koh, 2006). The results show that the number of intercultural knowledge sources, number of foreign languages knowledge, frequency of communication with persons from other cultures in private and business time and frequency of international travels correlate significanly with the score of Cultural intelligence scale and its dimensions.

Keywords: *Cultural adaptation, Cultural intelligence, Experience in intercultural communication, Increasing cultural intelligence, Intercultural Education*

1 INTRODUCTION

The competence for successful intercultural communication in global world is becoming increasingly important. Globalization has made the world seem smaller, our awareness of cultural diversity is rising and the need for effective intercultural communication is present in most companies, project teams and with the management.

Each expatriate needs different abilities and competencies for successful work than employees who work in their own countries. In the selection process some specific criteria should be used for prediction of future success in global environment.

Globalisation touches the employees who work in their homecountry too, because the interaction and transaction with foreign companies today is almost inevitable.

Researchers tried to find personality factors which predispose people for successful live and work globally. Downes, Varner and Hemmasi (2010) focused on Big Five personality traits and found that extraversion (the amount of interaction with the external world, being with people, to be action-oriented), emotional stability (ability to cope with stress, not get upset easily, cope with unexpected situations…) and openness (creative, imaginative, curious, adventurous, awareness of their feelings) have a significant, positive impact on expatriate adjustment. Agreeableness (the ability to form social alliances) is significant and positively associated with expatriate job performance.

The most important factors which distinguish successful employees from less successful ones are knowledge, abilities and motivation.

The concept of Intelligence first referred to intellectual functioning; intelligence is defined as general cognitive problem - solving skills. It is a mental ability involved in reasoning, perceiving relationships and analogies, calculating and learning quickly.

First it was believed that there was one underlying general factor at the intelligence base (the g-factor). Gardner (1983, 1999) developed the Multiple Intelligence Theory which consisted of 8 primary intelligences: linguistic and logical-mathematical intelligence (valued in schools), musical, bodily-kinaesthetic and spatial intelligence (valued in the arts or sport), interpersonal and intrapersonal intelligence ('personal intelligences') and naturalist intelligence.

Legg and Hutter (2006) studied different definitions and summarized with: "Intelligence measures an agent's ability to achieve goals in a wide range of environments".

Mayer and Salovey (1990) introduced a concept of "emotional intelligence" (the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's own thinking and actions), which became popular with Goleman's book Emotional intelligence; why it can matter more than IQ (1995). It was presented as an important factor of life and work success.

»Emotional intelligence is your ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behaviour and relationship.« (Bradberry and Greves, 2009).

Researchers found Emotional intelligence an important factor of success and satisfaction at work, attitude toward work, the ability for effective team work, stress management, quality of work and life, mental health and also a factor of selection of human resources for different jobs.

Emotional intelligence is a part of social intelligence, which was first introduced by Thorndike (1920) as "the ability to understand and manage men and women, boys and girls – to act wisely in human relations". Goleman (2006) defines social intelligence as a social awareness and social facility (response and adaptation to others and the social situations).

Earley and Ang (2003) developed the construct of cultural intelligence, defined as »an individual's capability to function and manage effectively in culturally diverse settings; a multidimensional construct targeted at situations involving cross-cultural interactions arising from differences in race, ethnicity and nationality«.

Cultural intelligence comprises metacognitive, cognitive, motivational and behavioural dimensions. Metacognitive cultural intelligence includes mental processes which individuals use to acquire and understand cultural knowledge, cognitive cultural intelligence reflects knowledge of the norms, practices and conventions in different cultures acquired from education and personal experiences; motivational cultural intelligence reflects the capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences. Behavioural cultural intelligence reflects the capability to exhibit appropriate verbal and nonverbal actions when interacting with people from different cultures (Ang et al., 2007).

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Cultural intelligence is related but distinct from other forms of non-academic intelligence (Ang, Dyne and Tan, 2003).

Some researches focused on factors that could improve intercultural encounters.

With studies of correlation between cultural intelligence and work outcomes Ang with co-authors (2007) found the relationships between the dimensions of cultural intelligence (metacognitive, cognitive, motivational and behavioural) and intercultural effectiveness (cultural judgment and decision making, cultural adaptation and task performance in culturally diverse settings). »Metacognitive and cognitive cultural intelligence predicted cultural judgment and decision making; motivational and behavioural cultural intelligence predicted cultural adaptation; and metacognitive and behavioural cultural intelligence predicted task performance. «

Rehg, Gundlach and Grigorian (2012) examined the influence of cross-cultural training on cultural intelligence and specific self-efficacy and found that cultural intelligence can be improved through training: training using a lecture format significantly improved average levels of cultural intelligence on the cognitive and behavioural dimensions, while it less significantly improved motivational dimension.

Successful intercultural communication is vital for organisations, their business success and global competitiveness. Organizations should consider candidate's personality as an important criterion for selection to work with business partners from other cultures and to work abroad. Cultural intelligence may be an essential element in the recruitment and retention process, due to correlation between cultural intelligence and job satisfaction and intent to renew contract (Sims, 2011) for international organisations as it has been shown to predict the cultural adaptability of people who find themselves in cross-cultural situations (Earley and Ang, 2003).

2 AIMS OF THE PAPER AND HYPOTHESIS
This paper aims to assess the relationship between cultural intelligence and cultural education, language knowledge and work experience and some organisational factors.

Hypothesis:
H 1: There are no differences in cultural intelligence scores according to gender, age and years of working experiences.
H 2: There is no correlation in scores on cultural intelligence scale and knowledge of foreign languages.
H 3: There are no differences in score on cultural intelligence scale according to the working place.
H4: There are no differences in score on cultural intelligence scale according to the some organisational factors (number of employees, number of foreign markets).
H5: Regression model shows no influence from educational independent variables (attendance in intercultural communication education, number of different ways to gather knowledge) on dependent variable (to cultural intelligence).
H6: There are no discriminant functions which distinguish more culturally intelligent student from less culturally intelligent ones.

3   METHOD

3.1   Participants

Data was collected from 107 part-time students of second Bologna level at Faculty for Commercial and Business Science Celje (study programs: commercial science, business informatics, tourism); 74 women and 33 men with average age 34,4 years who participated in the study.

3.2   Materials and data collection

Empirical method was used; data was collected with Culture intelligence scale (Ang, Dyne and Koh, 2006) and Survey about intercultural education and experiences.

All questionnaire items, originally published in English, were translated into Slovene; the students joining the subject Intercultural negotiation got written instructions and sent the completed questionnaires by e-mail.

4   RESULTS

Table 1: Descriptive Statistics for Cultural intelligence dimensions

Cultural intelligence dimensions	N	Minimum	Maximum	Mean	Std. Deviation
Metacognitive	107	1,75	7,00	4,8902	1,30771
Behavioural	107	1,60	7,00	4,7570	1,19212
Cognitive	107	1,67	6,17	3,8240	0,97259
Motivational	107	1,40	7,00	5,2449	1,19221
Total score CQ	107	2,20	6,70	4,6350	0,95476

Students get the highest average score on motivational dimension (M=5,24, SD=1,19) and the lowest in cognitive dimension (M=3,82; SD=0,97). The average score of the whole scale is above the middle of the scale (M=4,63; SD=0,95).

Results in table 1 show that student have good metacognitive, behavioural and motivational cultural intelligence and average cognitive cultural intelligence. Compared to the results of Arg et al. (2007), the score does not differ much from the average of the USA students' sample; who score a little higher on metacognitive dimension (M=5,00, SD=0,93) and motivational dimension (M=5,35, SD=0,93) and are lower than our sample in behavioural dimension (M=4,18. SD=1,18) and cognitive dimension (M=3,67; SD=0,97).

The influence of the gender on cultural intelligence was tested with t-test, there were no statistically significant differences between men and women. The differences between the age groups and also between groups concerning years of working experience were tested with ANOVA, and no significant differences were found. Work experience is not correlated with cultural intelligence scores.

Results support the hypothesis 1: There are no differences in cultural intelligence score according to gender, age of respondents and years of working experiences.

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Table 2: F-test of differences according to working place in Cultural intelligence dimensions

Cultural intelligence dimensions	Working place	N	Mean	Std. Deviation	F	Sig
Metacognitive	intercultural communication	6	5,7500	1,03682	1,544	0,218
	management	24	4,9688	1,37784		
	others	77	4,7987	1,29272		
	Total	107	4,8902	1,30771		
Behavioural	intercultural communication	6	5,7000	0,68993	2,185	0,118
	management	24	4,8167	1,41902		
	others	77	4,6649	1,12317		
	Total	107	4,7570	1,19212		
Cognitive	intercultural communication	6	4,6944	1,00784	3,406	0,037
	management	24	3,9792	0,96348		
	others	77	3,7078	0,94364		
	Total	107	3,8240	0,97259		
Motivational	intercultural communication	6	6,2333	0,52789	3,240	0,043
	management	24	5,4750	1,28782		
	others	77	5,0961	1,16013		
	Total	107	5,2449	1,19221		
Total score	intercultural communication	6	5,5583	0,69528	3,564	0,032
	management	24	4,7375	0,98469		
	others	77	4,5312	0,92984		
	Total	107	4,6350	0,95476		

We divided the respondents in three groups, according to their working place; part-time students who have a job with intensive intercultural communication, managers and others. Scores of the cognitive, motivational and total score are significantly different, depending on working place. Results in table 2 do not support the hypothesis H2: There are no differences in scores on cultural intelligence scale according to the working place.

Table 3: ANOVA of differences according to number of foreign languages spoken in Cultural intelligence dimensions

Cultural intelligence dimensions	Number of languages spoken	N	Mean	Std. Deviation	F	Sig
Metacognitive	1,00	40	4,5438	1,21012	4,090	0,020
	2,00	37	4,8378	1,43761		
	3,00 or more	30	5,4167	1,12252		
	Total	107	4,8902	1,30771		
Behavioural	1,00	40	4,3350	1,30827	5,242	0,007
	2,00	37	4,8378	1,23903		
	3,00 or more	30	5,2200	0,71506		
	Total	107	4,7570	1,19212		
Cognitive	1,00	40	3,6083	0,70261	6,454	0,002
	2,00	37	3,6396	1,08832		
	3,00 or more	30	4,3389	0,97033		
	Total	107	3,8240	0,97259		
Motivational	1,00	40	4,7900	1,20932	7,254	0,001
	2,00	37	5,2649	1,25968		
	3,00 or more	30	5,8267	0,78912		
	Total	107	5,2449	1,19221		
Total score	1,00	40	4,2725	0,82166	9,002	0,000
	2,00	37	4,5851	1,03949		
	3,00 or more	30	5,1800	0,76874		
	Total	107	4,6350	0,95476		

Scores of the metacognitive, behavioural, cognitive, motivational dimension and total score are significantly different depending on knowledge of foreign languages. Students with the knowledge of 3 and more foreign languages score higher on all culture intelligence dimensions. Results in table 3 do not support the hypothesis H 3: There are no differences in scores on cultural intelligence scale according to the knowledge of foreign languages.

The correlation between organisational factors and cultural intelligence were not significant; results do not support the hypothesis H4: There are no differences in score on cultural intelligence scale according to some organisational factors (number of employees, number of foreign markets).

Table 4: Regression analysis - Coefficients of factors influencing cultural intelligence (total score of CQ)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	4,067	1,001		4,063	,000
Gender	,041	,178	,020	,232	,817
Age	-,018	,031	-,156	-,581	,562
Work experience in years	-,002	,026	-,024	-,089	,929
Frequency of international communication in private time	-,261	,091	-,312	-2,878	,005
Frequency of international communication in working time	-,118	,070	-,188	-1,680	,096
Frequency of international travels	,266	,122	,254	2,182	,032
Organisation – number of employees	-1,219E-6	,000	-,003	-,033	,974
Organisation – number of foreign markets	,000	,002	-,018	-,193	,847
Number of learning sources	,153	,048	,363	3,204	,002
Working place	,011	,086	,013	,130	,897
Number of foreign languages knowledge	,240	,112	,203	2,144	,035

a. Dependent Variable: CQ aggregated (total) score

Regression analysis of factors influencing cultural intelligence showed that the multiple correlations between 11 independent variables and cultural intelligence are 0,619. With the variables included in the model we can explain around 40% cultural intelligence variance (square R is 0,383; F=5,301, Sig. 0,000). In table 4 we can see high value of Beta coefficient for variable Number of learning sources (0,363; persons who use more sources of knowledge have higher cultural intelligence), frequency of international communication in private time (-0,312; higher frequency of private conversation with the people from different nations is connected with higher cultural intelligence (frequency scale: very often=1, not at all 5), frequency of international business travels (0,254; lower frequency of international travel connected with work is connected with higher cultural intelligence (frequency scale: very often=1, not at all 5) and the number of foreign languages knowledge (0,203).

The Regression analysis of factors influencing specific dimensions of cultural intelligence showed some significant correlations:
- Metacognitive dimension is explained with number of learning sources (Beta=0,278, t=2,181, Sig.=0,032);
- Behavioural dimension with number of learning sources (Beta=0,289; t=2,333, Sig.=0,022), frequency of international communication in private time (Beta=-0,236; t=-1,989, Sig.=0,050) and frequency of international business travels (Beta=0,263, t=2,062, Sig.=0,042);

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- Cognitive dimension of cultural intelligence with Number of learning sources (Beta=0,301, t=2,528, Sig.= 0,013) and frequency of international communication in private time (Beta=-0,277, t=-2,432, Sig.=0,017);
- Motivational dimension of cultural intelligence with Number of learning sources (Beta= 0,291, t=2,458, Sig.=0,016), frequency of international communication in private time ((Beta= 0,313, t=2,755, Sig.= 0,007) and frequency of international travels (Beta= 0,268, t=2,202, Sig.= 0,030), number of foreign languages knowledge (Beta=0,196, t=1,979, Sig.= 0,051).

Results of regression analysis do not support the hypothesis H5: Regression model shows no influence from educational independent variables (attendance in intercultural communication education, number of different ways to gather knowledge) on dependent variable (cultural intelligence). There are some factors influencing total score: number of learning sources, frequency of international communication in private time, frequency of international travels and number of foreign languages knowledge.

Table 5: Differences between more and less culturally intelligent students

Independent variables	1 N=15		2 N=73		3 N=19	
	Mean	Std.deviation	Mean	Std.deviation	Mean	Std.deviation
Work experience in years	13,87	11,01	9,80	9,08	15,42	9,73
Frequency of international communication in private time	3,47	1,06	2,78	1,07	1,84	0,90
Frequency of international communication in working time	3,40	1,64	2,58	1,44	1,58	1,22
Frequency of international travels	4,47	0,92	4,16	0,83	3,47	1,17
Number of learning sources	2,33	1,18	3,27	1,76	6,33	2,77
Organisation – number of employees	250,07	423,27	928,08	2438,33	818,84	1849,35
Organisation – number of foreign markets	0,73	2,09	19,51	52,68	11,74	16,28
Age	36,40	8,02	33,15	7,81	37,84	9,08
Number of foreign languages knowledge	1,47	0,52	1,88	0,82	2,42	0,69

Students were divided into 3 groups according to their score on cultural intelligence scale; (AS=4,64, SD=0,955; group 1: less than 3,68; group 2: 3,68-5,59; group 3: more than 5,60)

Table 6: Summary of Canonical Discriminant Functions

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation	Wilks' Lambda	Chi-square	df	Sig.
1	,618[a]	86,0	86,0	,618	,562	57,116	18	,000
2	,100[a]	14,0	100,0	,302	,909	9,479	8	,304

Discriminant analysis eliminated 1 discriminant function which divides individuals who have high, moderate and low cultural intelligence (table 6).

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Table 7: Structure matrix

Independent variables	Correlation Function 1
Number of learning sources	,841[*]
Fequency of international communication in private time	-,567[*]
Number of foreign languages knowledge	,465[*]
Frequency of international communication in working time	-,441[*]
Frequency of international business travels	-,365[*]
Work experience in years	,159
Age	,155
Organisation – number of foreign markets	,033
Organisation – number of employees	,063
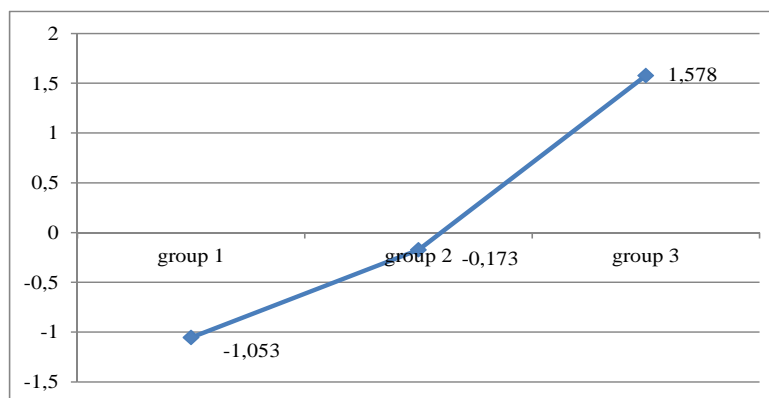
Chart 1: Unstandardized canonical discriminant functions evaluated at group means

Results do not support the hypothesis H6: There are no discriminant functions which distinguish more culturally intelligent students form less culturally intelligent students. The discriminant function shows the difference variables: number of learning sources, frequency of international communication in private time, number of foreign languages knowledge, frequency of international communication in working time, frequency of international business travels.

5   DISCUSSION OF RESULTS

Researchers have begun to study new concepts of practical intelligence to find the answer to the question why some individuals perform better than others in situations which involve interaction with people from different cultural background. Cultural intelligence was conceived in the new century, when we have experienced a great expansion of globalization. Effectiveness in global environment is vital for a great number of organisations, which need leaders and employees who are capable of understanding, functioning, and managing in the global environment. They can bring the organisations a competitive advantage (Ang and Inkpen, 2008).

In the study, whose main aim was to assess the relationship between cultural intelligence and cultural education, language knowledge, work experience and some organisational factors, we measured the cultural intelligence of the students, who listened to the subjects Intercultural negotiation and Intercultural communication at second Bologna level. Their average score on the cultural intelligence scale was above the middle level of scale (M=4,63, SD=0,95). Looking into the dimensions of cultural intelligence, we can see that the highest average score

was in motivational dimension and the lowest in cognitive dimension. Only some students have work-experience in multicultural environment, and therefore their knowledge about rules in other cultures is limited. Metacognitive and behavioural cultural intelligence are also above the middle of the 7 level scale.

Students have above average capability to direct attention and energy toward learning about and operating in culturally diverse situations. Results of our students are similar to results of other students and higher than in employees involved in different studies conducted by Ang et al. (2007).

There is no influence of the gender, age, years of work-experiences, size of the company and number of international markets on cultural intelligence.

The working place is an important factor of cultural intelligence. Cognitive and motivational dimension and total score of cultural intelligence are significantly different depending on working place. Part-time students who have a job with intensive intercultural communication score higher than managers. The lowest score was found for students, who have others workplaces or are unemployed.

Those results support the findings about possibility to increase cultural intelligence through learning (Ng, Dyne and Ang, 2009).

Knowledge of foreign languages is a significant factor of cultural intelligence. Students with the knowledge of 3 and more foreign languages score higher on all culture intelligence dimensions. Learning new languages can increase the abilities for successful working in global environment.

Variables number of learning sources, frequency of international communication in private time and number of foreign languages knowledge positively correlate with cultural intelligence and explain more than one third of cultural intelligence variance.

Practical implications following from these findings are: organisations should provide more different knowledge source, the more sources will an individual use the bigger increase in cultural intelligence can be anticipated.

The correlation with business international travel is nominally positive, but because the scale of frequency was negative (from more frequent to less frequent), the number of international business travels does not increase cultural intelligence. Closer look into the results shows that only 4 students have frequent work obligation abroad and more than 75% have rare or no such situations.

Practical implications following from these findings could be that organisations should stimulate employees for bigger involvement in language courses, gathering knowledge in different ways and gathering experience with private involvement in intercultural situations.

Discriminant analysis showed factors which distinguish more and less culturally intelligent individuals: the number of learning sources, frequency of international communication in private time, number of foreign languages knowledge, frequency of international communication in working time, frequency of international business travels.

The results of the study support the findings from researchers who found that international experiences can increase cultural intelligence (Ang, Dyne, Tan, 2003) and supplement the range of organizational interventions for enhancing global leadership effectiveness which range from didactic programs to intensive cultural experiences (Caligiuri, 2006) with the promising positive influences of different experiences of communication with people from different cultures and the ability to converse in a different language. Crowne (2008) showed that number of countries visited correlates with cultural intelligence, presented study shows that also frequency of communication with other cultures correlates with cultural intelligence.

6   CONCLUSION

Cultural intelligence is a new construct that has no extensive attendance in Slovenia yet; the study advances the research on cultural intelligence with some new variables concerning educational factors and experiences.

The findings of this research identified a number of different ways of gathering knowledge as important possibility to enhance cultural intelligence and consequently success in global environment.

Important factors of cultural intelligence are, beside the number of intercultural knowledge sources, also the number of foreign languages knowledge, frequency of communication with persons from other cultures in private and business time and frequency of international travels which correlate significantly with the score of Cultural intelligence scale and its dimensions.

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CHALLENGES OF THE WELFARE STATE: THE SPANISH CASE

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ABSTRACT
Recent events - especially the economic crisis- have revealed the need to maintain the welfare state, especially in developed countries (the most attacked by the crisis) which are also hit the hardest by the recession and job losses. On the one hand, the increase in demand for social services joins the decreased capacity to collect taxes as a result of the fall in economic activity and declining social contributions because of the rising unemployment. On the other, economic difficulties to prop up the welfare of citizens have caused the most unrest and political debate about whether social spending is precisely that what must suffer cuts to balance the public accounts. The answer of each country to this question will depend on its ability to meet new challenges without compromising the future of younger generations. The objective of this paper is to discuss the Spanish model of welfare, taking into special consideration the demographic effects of an aging population and the reversal of migration flows in order to discern which direction and what concrete measures can answer the previous question. This has been a response that in the Spanish case, has highlighted the need to review the excessive benevolence in granting a benefits system and the existing pockets of fraud in the tax system.

Keywords: Economic Crisis, Social benefits, Welfare State

1 INTRODUCTION

It is obvious that the recent events undergone by most developed countries have revived the controversy over the level of Welfare State (WS) viability.

Regardless of the doctrinal discussion aroused by the increasing presence of the public sector in the economy, new arguments have been swayed in regard to the size of such in the so called market economies, among which the Spanish economy is found, and about what should be the priority actions and the amount of benefits offered by WS, both in way of services and pecuniary value, to its beneficiaries.

2 THE SPANISH WELFARE SYSTEM

It is a well-known fact that the functioning designed by the constituent legislator in the text that was passed in 1978, when speaking about the Social State[1] and "economy market", has been the legal frame of the highest rank under which the progressive enlargement of its benefits has been implemented, both in subjective terms (the population that benefits from such) and objective terms (the number of situations that are covered).

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[1] The Magna Norm, in its 1st article states the following: "Spain is constituted as a Social State and democratic by Law, upholding as core values of its legal system freedom, justice, equality and political plurality" and in the 38th article (within the section that refers to the rights and obligations of citizens) it says: "Free enterprise is recognized within the frame of market economy. Public authorities shall both guarantee and protect such exercise and defend productivity, in accordance to the requirements of the general economy and, in its case, the planning thereof."

Traditionally, the intervention of the public sector in the economy aimed towards achieving the citizenship´s wellbeing has been defined in three main fronts:

- Designing of fiscal and monetary measures (for instance, by means of applying very progressive taxation or granting loans at a low interest rate).
- Investing in the development of public services which are necessary in order to assure an adequate level of life for citizens.
- Adopting normative dispositions to monitor the social and employment conditions of citizens, not only those that have to do with job performance, but also those whose end is protecting the weaker (underage, dependent, outcast, unemployed).

To that end, the WS has basically focused on achieving three objectives:
- Financial security.
- Reducing inequality.
- Fighting poverty.

With those purposes in mind, the manifestations of its protective actions have been increasing in an ever-growing catalogue of benefits.

Thus, seeking to guarantee worthy levels of income –not only for workers[2]– since keeping a worthy level of life is considered to be a right, not charity, the system foresees benefits of economic nature in the cases of retirement, disability, unemployment, etc., but also the free supply of certain goods and services. It is known that in Spain access to education is universal and free (besides mandatory) between six and sixteen years of age and that health assistance is also universal and free through the National Service of Health[3].

In this way, the justification in Spain rests in on the fact that, as a consequence of certain events, whether they be expected (old age) or unexpected (unemployment, disability), there is an uncertainty generated over the income flow of individuals receiving public aid and the granting of this kind of benefits try to reduce.

In order to have this inequality reduced[4], measures can be applied that affect the generation of revenue, for instance, by means of implementing progressive taxes, but also through an ample catalogue of services and benefits that would allow for the equality of opportunities, since the income that the market itself yields (functional sharing of income) directly relates with factor productivity and this is in turn –as it is known– closely dependent on human capital. For that reason, besides the income perspective, the expenditure side (which represents an important part of the WS models) has a meaningful effect on the achievement of equality. Such is the case of education or health.

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[2] Let us remember that the origins of the Spanish welfare system trace back to Bismarck´s professional model.

[3] Access to medicines is articulated by means of a copayment formula (40% in general), although some medicines are foreseen to be provided free of charge to certain collectives (pensioner or chronically ill). Nevertheless, as will be stated later on, these formulas have been revised, not without controversy, in order to demand a higher co-responsibility in the use of medicine on the part of the patient, and some Autonomous Communities, since health competencies were totally passed on to them, have established the payment of 1€ per prescription (such is the case of Madrid and Catalonia) which has presently been appealed against before the Constitutional Court in some cases (Catalonia) or is expected to be shortly (Madrid).

[4] Needless to insist that equality favors social cohesion and this is also one of the modern objectives of WS.

Finally, with aims to achieving the objective of fighting poverty and in order to favor the integration of the outcast, the WS foresees policies and grants benefits in the case of unemployment, for instance, but it also supplies a wide catalogue of social nature services to those who have less free of charge.

3   THE SPANISH RECENT CONTEXT

Certainly, all the development and expansion experienced in Spain has not been indifferent to the concourse of several factors which are economic, political, social and demographic in nature, and which determine the new horizon that it will have to face in a short frame of time and which will affect its financial viability in the long term, that is, its sustainability.

A brief overview over the financial model of the Spanish welfare system, sticking to the Social Security, education and health, reveals the close dependence existing between its level of resources and the development of the economy.

It is true that, in the recessive stages of the economic cycle, to the inherent challenges of obtaining public resources (to fund health or education) we have to add, in the Spanish case, the difficulties in collecting contributions (of employees and employers) and the imbalance that results from facing a wider catalogue of situations of need[5] affecting a growing number of potential beneficiaries (real ones), and in turn increasing the cost of opportunity of continuing the collection of resources for WS purposes.

But in the Spanish model there have also concurred other factors of political nature, like the booming demand for social benefits that took place after the establishment of democracy in our country, and especially considering the gap that existed when compared to those countries of our closer economic surroundings.

This comparative backwardness, therefore, led to an unparalleled growing social expenditure that now needs to be, not only maintained but, increased since the coverage threshold in social matters keeps an upward trend and any holdup or regression is interpreted as social involution process, which is difficult to defend from a political stand point.

But in the Spanish case, the to-a-certain extent "logical" evolution of the welfare systems linked to the democratization processes of society (in which there has been a transfer between political rights to social rights) has been joined by a firm process of administrative decentralization , the so-called "Autonomies State", which has not been exempt from malfunctions and criticism from the WS development point of view, and which has occasionally led to wasting public resources and lack of control over the expense on wellbeing, getting even to create situations of discrimination among citizens, depending on their location in the Spanish territory (Autonomous Community in which they live).

Other factors of social nature, like high levels of fraud[6] in the perception of benefits (pensions, unemployment, dependency, health or pharmaceutical expense) or the failure to disclose income in contributing to the system (irregular recruitment), while at the same time

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[5] Almost complete lack of resources or a significant reduction of them.

[6] For example, a report by the Court of Auditors published on January, 2012, has shown the dependency income of 30,000 deseased persons has been paid, amount that represents over 140 million euros ever since the Dependency Law was passed (December 14, 2006).

the political agenda pulls out benefits that were not formerly part of the WS configuration (as is the case of the dependency), have contributed to the questioning of the financial viability of the system.

Finally, and as if all the aforementioned issues were not enough, a series of variables of demographic nature has irrupted affecting the WS sustainability and, as it happens in Spain, have become even more obvious as a result of the basic data linked to the economic development: on the one hand, the birth rates decrease and, on the other, the life expectancy increases.

It is true that, during the later years of economic boom, the increase of dependency rates (ratio between pensioners and contributors) which is consequence of the "ageing of ageing"[7]has been compensated by immigration (Del Brío Carretero and González Rabanal, 2004, pp. 105–124), but it is also true that direction of migrations has changed[8] as a consequence of the economic crisis (once again, Spain has become a country of exiting net population). This change has come together with a growing concern for brain-drain and has forced our welfare system, during all this time, to assume from the beginning the increase of certain components of social expenditure linked to the immigration phenomenon (Gimeno Ullastres and González Rabanal, 2003, pp. 155–165) and, more recently, to the loss of qualified human capital. It has also been necessary to face other challenges which come as a result of the progressive ageing of the population (higher amount of retirement pensions because of increasing number of pensioners that result from early retirement and reconversion processes, as well as the higher life expectancy).

4   THE CHALLENGES

In order to have a better knowledge of the challenges that the future of the WS in Spain faces, it is necessary to go over the reasons that have explained its main components.

The expenses in health have grown considerably in Spain as a result of considering health a universal benefit in nature (General Law of Health, 1986), which has entailed a significant increase in the number of beneficiaries and, in some cases, has led to abusing the benefits granted by the National Health Services (sanitary tourism, fraud in medical prescriptions…). That has come together with other phenomena that have important effects over the increasing health expenditure. I am referring to the impact that an ageing population has over such (Spain is at the head in life expectancy statistics[9]); the innovation and technological advance processes which affect, not only the provision of services, but also diagnosis or treatments; medication in processes that are not strictly medical; the decreasing disease tolerance; the loss of co-responsibility on the part of the patient[10] for his or her use of services; the increase in the number of hospital beds; the abuses of diagnostic tests and the growing expenses in staff.

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[7] A recent study of the Population Fund of the United Nations (PFUN) shows that the population in Spain that is 60 years old or more represents 22.7% of the total amount and in year 2050 this amount will increase to 38.3% thus placing us in the eighth place in the world.

[8] Until recently, Spain has been a net receiver of immigrants in which the foreign population has represented 12% of the sum total of citizens.

[9] In 2012, life expectancy was 81.9 years. This number has increased since 2008 in almost half a year and increases every passing day in 4.8 hours.

[10] The concept of universality gets confused with gratuity which leads to an abusive use of the services offered.

In the case of the development of expenses in pensions, the explaining variables can be classified into three categories: once again the demographic factor, the normative or political factor (acknowledgement of non-contributive benefits, which used to be of assistance), and the financial crisis context.

In the case of social expense in education, such has been universalized (1982–85[11]), there has also been –just as it happened with the health system- a total decentralization of competencies and the period of mandatory schooling has been increased from age 14 to age 16 (1990), although approximately 1/3 of all students are studying in subsidized schools.

With this panorama, what are the main challenges that the WS in Spain is facing? In general, guaranteeing the sustainability of the system in the long term, becoming necessary to intensify actions against fraud, improving the financing system so that, in the case of Social Security, the contribution rates and its basis would match real wages, encouraging the use of generic medicines, establishing taxes on certain consumptions or the practice of some unhealthy habits or extreme sports, rationalizing expenses –whether centralizing supplies or, at least, the information about the product cost offered by different suppliers and, even, the same supplier in different territories or for different centers-, carefully analyzing the effects that result from the migratory phenomenon and, under any circumstance, prevent fraudulent recruitment, expand the working life of employees (linked to exiting the crisis and improving employment), extending the calculation period for the retirement pension to all the contribution history, postponing the retirement age according to the higher life expectancy of the population, rationalizing the financing system of benefits and monitoring the fraud in their perceptions, foreseeing the creation of funds or remnants in order to reduce the level of dependency of resources to the economic circumstances of the moment, improving the schooling performance rate, increasing the average expense on students and reducing the student/teacher ratio, working on adjusting the educational system to the formation needs of the labor market, improving the pedagogic capacities of teachers, stressing individualized treatments and the adoption of programs adapted to the level of intellectual capacity of the student, favoring talent, regardless of the economic stratum of origin …

5   CONCLUSION

The especial circumstances under which the expansion of the WS took place in Spain have been conducive to a set of characteristics that have affected its future development as well as the possible challenges faced in the actual context of economic crisis.

Its fast and belated expansion, the obsession to rise to the level of other current models in the countries of our closer economic surroundings, the especial incidence of political variables (democratization, administrative decentralization), as well as social (considerable increase of the coverage provided, fraud), economic (the context of the crisis, maybe worse and longer lasting than what other countries have considered) and demographic (strong birth rate decline and firm increase of life expectancy), have made our expenditure in wellbeing to be, in terms of GDP, one of the fastest growing accounting entries that our country has experienced since democracy was established.

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[11] On July 3, 1985, an Organic Law is passed that regulated the Right to Education.

Nevertheless, the present economic crisis context in which the future of the most highly developed economies lies increases the cost of opportunity of obtaining resources towards that end.

Because of all those reasons, it is expedient to face the challenge of ageing of the ageing, of the excessive cost of certain entries that are a consequence of fraud, or of the low level of responsibility of those involved…, without entailing a regression in the level of coverage that was achieved. It is expedient to favor rationality in the use of resources, which are evermore necessary while scarcer, seeking out efficiency and a return in those services provided and expenditures realized, trying to make them more suitable, not only to the needs of individuals, but to the needs of society as a whole. That is the only way the financial sustainability of the system will be ensured as well as the wellbeing of present generations, without compromising the future ones so that, what has been achieved so far may be consolidated and even improved in the future, regardless of what may happen in the economy and its adverse cycles.

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INTERNATIONALISATION AND MOBILITY IN HIGHER EDUCATION

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ABSTRACT

Sustainable development has become an important issue on international, regional and national agendas concerning education, internationalisation and mobility policy over the past few years. The new vision of education emphasises a holistic and interdisciplinary approach to developing knowledge and skills needed for a sustainable future, as well as the necessary change in values, behaviour and lifestyles. More and more students are choosing to study abroad with the Erasmus programme, which supports cooperation and mobility in higher education. Erasmus, Erasmus Mundus and Tempus programmes support mobility, partnerships and international educational cooperation. Higher education institutions have identified at least three criteria for a "beneficial" curriculum: internationalisation is an explicit goal of the degree programmes, there is room in the curriculum for internationalisation and the curriculum allows flexibility when it comes to details such as recognition of credits or recommended study schedule. The programme also supports cooperation among higher education institutions and mobility for academic, technical and administrative staff. The current social development is changing the European higher education scene through increased international student and faculty mobility, internationalization of study programs and schools, and the opening of local higher-education markets to international competition. The world of work, growing more and more international and multicultural, needs people who are able to find their way across national, cultural and ethnic boundaries Paper discovers mobility, internationalization and sustainability implementation into higher education programs in the Slovenian higher educational private institution and ways of fostering sustainability in higher education. Based on findings of the evaluation, this paper outlines a mixture of recommendations and ideas on several levels: national, institutional and operational.

Keywords: Curriculum, Education, Internationalisation, Mobility, Slovenia, Sustainable higher education

1 INTRODUCTION

Sustainable development has become an important issue on international, regional and national agendas concerning education, internationalisation and mobility policy over the past few years. Education, research and innovation play a central part in the promotion of sustainable development. EU is and important regional actor for Slovenia. The ideal would seem to be that education for sustainable development should support the value-based inter-generational interpretation of sustainable development, which already in itself encompasses the idea of nurturing all the elements of sustainable development in a based way and in dialogue with one another. Sustainable development should be seen as a dynamic process; accordingly, development goals should be reviewed when visions, circumstances and the level of knowledge change. UNESCO (2005, p. 2) emphasises the importance of improving the quality of learning in education for sustainable development. In addition, the current priority is that education for sustainable development should be included in all education. Socially and culturally sustainable development requires that we intentionally build

institutions that are more humane and supportive of all of their members. Education for sustainable development in business schools starts with the challenges related to the general societal and environmental situation and development opportunities for corporations. When information on environmental or societal questions is presented in relation to a student's world view, values and background, a student will be more motivated to assimilate the information. Information on sustainable development increases a student's sense of responsibility and sensitivity to related issues, which are fundamental elements of responsible behaviour. Transformative learning is a collective process of teachers and students (Wals, 2006, p. 49). Corporate social responsibility as well as internationalisation can be improved when the top and middle management is educated to integrate not only financial issues but also environmental and social issues in strategic overall management.

The new vision of education (especially higher education) emphasises a holistic-and interdisciplinary approach to developing knowledge and skills needed for a sustainable future, as well as the necessary change in values, behaviour and lifestyles. It should be remembered that sustainable development is a moral precept as well as a scientific concept which includes also the internationalisation and mobility in higher education process. European countries will make a common strategy for the first time with the concrete aim of crating better conditions for mobility in Europe. More and more students are choosing to study abroad with the Erasmus programme, which supports cooperation and mobility in higher education. Erasmus, Erasmus Mundus and Tempus programmes support mobility, partnerships and international educational cooperation. The programme also supports cooperation among higher education institutions and mobility for academic, technical and administrative staff.

Our aim is to discover mobility and internationalization, sustainability implementation into higher education programs or subjects in the biggest private Slovenian educational institution. It has been it has been established in 2005 and over 2000 students are enrolled every year and it offers three programmes - commerce, tourism and business informatics. The second aim is to learn about ways of fostering sustainability in higher education as well as its implementation.

2   SUSTAINABLE HIGHER EDUCATION AND STAKEHOLDERS

The present global crisis emphasizes stronger than ever the idea of corporate responsibility, a new commitment to responsibility being demanded of companies as well as educational institutions (state and private) in order to create economic and social value. Organizations and society at large recognize that ethically and socially responsible behaviour plays a crucial role in good business practices. The current social development is changing the European higher education scene through increased international student and faculty mobility, internationalization of study programs and schools, and the opening of local higher-education markets to international competition. An important part of innovation of this changing is also how to transmit appropriate knowledge, skills and values from society to people (Potočan and Mulej, 2010). Giacalone (2008) suggests that business schools need to ensure that students are equipped with ethical integrity to meet challenges in the real business world (Lau, 2009).

The current economic and financial crisis is not the only world-wide crisis. As Porter and Kramer (2002) highlight, companies (as well as e.g. universities/faculties) have to change their focus towards the social setting in which they act and interact. In January 2003, the National Council for Science and the Environment (NCSE) released its recommendations for Education for a Sustainable and Secure Future (2003), a document written to "shape the

upcoming United Nations Decade of Education for Sustainable Development (2005–2015)." Development, higher education institutions are responding to the call for leadership by starting and/or expanding environmental education programs, integrating sustainability issues throughout the curriculum, adopting sustainable operations, and building green facilities, stakeholders involvements, as well as mobility and internationalisation of educational institutions. The growing use of corporate social responsibility all over the world, firms and educational institutions are increasingly incorporating social strategies and CSR initiatives, giving a positive response to a real stakeholders demands. They strive to develop reflective and critical business leaders who believe in the competitive advantage of business organisations as well as in the harsh reality of global competition. These are not contradictions – it is about driving sustainable change in business and society. Good case presents 'The 2010 CBS Report on Progress': UN Principles for Responsible Management Education (PRME) summarises what the Copenhagen Business School (2010) has accomplished and plans to accomplish since committing to furthering the implementation of PRME's objectives as a signatory in August 2008. The main part of the report is divided into six sections, based on themes from the six different PRME principles: business in society (purpose), curriculum change for sustainability (values), interdisciplinary approaches (methods), a sustainability platform for social impact (research), understanding complexity through interaction (partnership) and stakeholder engagement for sustainability. Their broad range of disciplines helps them prepare graduates and faculty better to address the grand societal challenges of the global economy.

Factors of successful change efforts in higher education identified in the literature as being related to successful transformative change processes in higher education are (McNamara, 2010): (1) internal conditions, (2) external environments, (3) leadership characteristics), (4) change process; (5) engagement of constituents; (6) facilitated learning and (7) change characteristics. The list of recommended strategies and suggests methods for implementing the sustainable strategies are (McNamara, 2010): (1) obtain backing of the college/university president's office as a champion of the initiative; (2) institutionalize the sustainability initiative; develop, formally adopt, and implement a sustainability plan; (3) allocate resources necessary to achieve the plan; (4) foster greater and more active participation of the faculty in promoting sustainable efforts; (5) build a strong student commitment; (6) engage more people; (7) try to get everyone to be part of a continuing effort and stay the course and pick up the pace!

3 HIGHER EDUCATION AND WAYS OF INTERNATIONALISATION

The internationalisation of higher education has many functions. One important function is to prepare students for an international living and working environment. The world of work, growing more and more international and multicultural, needs people who are able to find their way across national, cultural and ethnic boundaries. The main problem in supporting internationalisation is not the absence of ideas and opportunities but rather that there is no systematic planning of internationality. Activities which support internationalisation are often arranged in a haphazard manner, without proper planning. This is why internationalisation is hard to integrate to the curricula and why the various models supporting it remain isolated experiments. To replace such random practice, the means of internationalisation should have well-defined learning outcomes to help the students work on their international competencies through-out the curriculum.

Higher education has many ways of supporting internationalisation these are (Garam, 2012, pp. 2–27):

a) International student mobility, which translates into a minimum of three months of study or training abroad, is till the main mode of introducing internationality into a degree programme.

b) Intensive courses, summer schools and other short-term international modules wrap a range of international activities into a single package.

c) Teacher's mobility and incoming lecturers foster an international perspective.

d) The integration of international and Slovenian students through joint courses taught in a foreign language is another mayor way for Slovene students to become more international.

e) At their best, language and communication studies combine the study of language with cultural and communicative knowledge.

f) The availability of studies in cross-cultural communication varies a great deal.

g) Information and communication technology may replace or complete physical mobility through, for example, streamed lectures of distance assignment which are part of mobility period.

h) An international perspective in the teaching can be created through international literature or case studies, by taking and international focus in one's research and by introducing and comparing international practices.

Internationality can become more systematic and planned, when there is a logical continuum from national-level steering to institutional policies and individual students. Several institutions accumulate individual elements supporting internationalisation into a module which the students can include in their degree. The international module should have proper learning objectives and a clearly defined extent. The criteria for crediting courses and other models of study should also be defined. Internationality should be an explicit goal of the degree programmes and there should be room for it in the curriculum. Flexibility on details is also called for.

Higher education institutions have identified at least three criteria for a "beneficial" curriculum: (a) internationalisation is an explicit goal of the degree programmes; (b) there is room in the curriculum for internationalisation; (c) the curriculum allows flexibility when it comes to details such as recognition of credits or recommended study schedule. Van der Wende prognoses structural ways of internationalising the curriculum. Listing the criteria of internationalised curricula, her typology is one way of conceptualising different structural choices which can integrate an international dimension into the content of higher education curricula (1996, p. 46). Higher education is all for making internationality an integral part of the studies, yet separate international modules are being built.

The personal study plans, which all students make, can also be made to serve internationalisation, as they are on opportunity to provide more individual guidance and to pay closer attention to the students' individual circumstances. Research literature defines the international curriculum through goals/outcomes, contents and target group. An international curriculum prepares the students for an international environment and explicitly seeks to provide them with knowledge, skills and a frame of mind for cross-cultural communication (Green and Mertova, 2009; Wende, 1996). Education can become international only with the combined efforts of the management and the grass roots of an institution: the institutions define the goals and policies of internationalisation, while the degree programmes set the

learning objectives and work on the curriculum, teaching practices and assessment in accordance with the goals (Olson et al., 2008; Clifford, Josephs, 2005). To look at the structures only does not describe the concrete ways which internationalise teaching practice and processes; it may provide the big picture, but not the fine detail (Green and Mertova, 2009, pp. 40–41). The concrete ways of internationalisation can be placed under three headings: student mobility, staff mobility and internationalisation at home (Green and Mertova, 2009, p. 31–34). Students have traditionally made us of international mobility. The problem is, however, that international mobility often lacks clear learning objectives, and if these goals exist, there are few ways of follow-up (Green and Mertova, 2009, p. 36). Much talk about internationalisation focuses on mobility, even if most students do not take part in it. Internationalisation at home should be available to all – through, for example, international literature, international case studies and examples in the classroom, teachers from abroad, foreign students in one's own institution, a multicultural campus and virtual international contacts (Beelen, 2011; Green and Mertova, 2009, p. 32).

While teaching through a foreign language does not in itself make teaching international, it is hard to imagine an international department without courses given in a foreign language. A positive approach to internationalisation is called for on many fronts, from the management of the institutions to the teachers and students. The management is on the whole considered to feel positively about internationalisation. Their support can be seen in many ways: (a) internationalisation is given a prominent place in institutional strategies and development programmes; (b) policy guidelines support internationalisation; (c) internationality features in the goals, monitoring and resource allocation of institutions, degree programmes and the work of individual teachers; (d) internationalisation is encouraged, and the management shows leadership by example. The teachers meet many pressures and demands. Working on internationality is just one of them. Also, not everyone is ready to teach a multicultural group in a foreign language.

Working life needs are a central argument in justifying a strong or weak international perspective. The degree programmes differ in the extent of their active working live contacts. One of the means are alumni as coaches and sources of information of the kinds and competences needed in working live. According to the representative of the degree programmes, international competences are what the students are expected to have, but there are variations by educational field. Three criteria stand out: an international perspective on one's own field, intercultural competence and an awareness of global linkages. The students are expected to have the following competences in particular: language skills are considered central among the competences gained through internationality, and fluency in English is regarded as especially important. The curriculum needs to prepare the students to keeping an eye on what goes on in the outside of Slovenia, as well as ability to communicate across cultural and national boundaries. The higher education representatives felt that their institutions provide students with reasonable competences to use and improve their language skills and to monitor the international developments of their own field. The world of work, growing more and more international and multicultural, needs people who are able to find their way across national, cultural and ethnic boundaries. The strategy for the internationalisation of higher education institutions in Slovenia (prepared by Ministry), sets the goal that Slovene higher education provide the students with competences to work in an international environment and that all higher education degrees incorporate a module supporting internationalisation process. This module is expanded on in the student's personal study plans and can be completed through a mobility period or international courses.

4 CURRICULUM AND INTERNATIONAL MOBILITY - CASE

Problem definition – Many educational institutions abroad have successfully implemented sustainability and mobility into higher education curriculum as well as in the strategy. Researchers, mentioned before, indicate that business sustainable education and internationalisation implementation into business education have many positive effects on students and their behaviour as manager and leaders in business practice and international competitiveness. Responsible governance helps educational institutions to build good relations with stakeholders and support the strategies, which have to be holistic and systemic. Students are very important stakeholders, mobility helps by internationalization process of educational institution as well as its competitiveness in the educational market in Slovenia and abroad.

Hypothesis: The biggest higher educational institution of commerce and economics in Slovenia has implemented sustainability curriculums (partly – some topics are included) as well as systemic and holistic internationalisation and mobility into its strategy.

Methodology: Web page of faculty and mobility reports as well as in-depth interviews with persons included into mobility process have been realized with the aim to indicate how sustainability is included into curriculums of various higher education programs/modules. Simultaneously, in-depth interviews with professors (lecturers, staff and students – totally 16) were used to highlight the whole mobility process of each group of outgoing mobility. Incoming mobility has not been realized in the period of 2008–2011.

Research questions: Are subjects which include sustainability implemented into higher education curriculums? Has educational institutions implemented sustainability and mobility into its strategy? Mobility - In which type of mobility have you been involved in which countries and how long (days/months)? We ask you to evaluate the whole mobility process – preparation, organization and realization, financial support, the usefulness of the knowledge and experience in the work? Has mobility contributed to the development of your skills and how did you present your experiences to other (potential and previous) mobility participants? How do you evaluate the mobility coordinator work and support? Based on this experience, how likely are you to recommend mobility. What would you like to recommendations the faculty management about internationalisation and mobility in the future?

Research findings in general – Sustainable curriculum and subjects (mostly as the elective subjects) at all levels of Bologna education process have been successfully implemented in the biggest private faculty of economics and business in Slovenia. On the other hand it is significant that the faculty do not pay enough attention to sustainability and it should be more proactive and flexible (by reaccreditation of the curriculum it has to be respected). Very often we discuss about corporate responsibility but very seldom about responsibility of universities/faculties (business schools) and which part of their responsibility is oriented to the curricula and quality of their programmes as well as their participation to sustainable development and welfare society. Educational institutions (state and private) still have not implemented the holistic and systemic sustainable educational management into their strategies and they do not report about their activities in their reports (sustainable educational report). The top management should be the motivator and beginner but all stakeholders must be involved in this process, internationalization and mobility is just part of it. The particular challenges that mobility poses have to do with student motivation and quality assurance. Students (in Turkey and in Spain) were very good supervised. If they are good informed they

would know better which courses they can take abroad and what they need to complete before departure. Good preparation can avoid potential problems, proactive orientation is very important. Intensive course, summer schools and other short-term international modules wrap a range of international activities into a single package. These include the mobility and co-operation of students and teachers, studying in a multicultural group and new international perspectives. Intensive courses often also lead to closer international co-operation, and a module of one or two weeks is easy to fit into the teacher's work plans. Teachers mobility and incoming lecturers foster an international perspective. They contribute to staff training, help to export know-how and to prepare joint projects. The programmes and faculty support mobility by incorporating it into the planning of their overall work and make it more systematic by setting and monitoring mobility goals. Integration of international students is promoted outside the classroom by, for example rewarding students who take up tutoring international students. The availability of studies in cross-cultural communication varies a great deal. It also makes sense to use the expertise of institutional language services or language centres. Information and communication technology may replace or complete physical mobility through, for example, streamed lectures or distance assignments which are part of a mobility period (especially when financial support is limited). On the other hand, technology can also provide easy-to use solutions: students can meet through virtual platforms, video-conferencing makes it possible to attend lectures streamed from abroad, and email enables easy communication. An international perspective in the teaching may be challenging in practice, because internationality is then the responsibility of every single teacher and of no one in particular. All above mentioned activities have been implemented and we can see the positive results. Faculty has also implemented criteria of international sustainable curricula which integrate an international dimension (Garam, 2012): (1) the curriculum has an international subject or content, (2) the curriculum has broadens the original subject area by an internationally comparative approach, (3) the curriculum prepares students for international professions, (4) the curriculum with a focus on language and cultural studies explicitly addresses cross-cultural communication issues and provides literature of training in intercultural skills, (5) interdisciplinary programmes such as regional and area studies (base for projects), (6) the curriculum leads to internationally recognised professional qualifications, (7) the curriculum leads to international joint or double degrees, (8) the compulsory components of the curriculum are offered at institution(s) abroad and are taught by local teachers, (9) the curriculum (just few subjects) is explicitly designed for foreign students.

The internationalization and mobility are integrated in the strategy and faculty reports (evaluation report and annual report) about its activities where stakeholder management plays very important role. Mobility from 2008–2011 has been realized in EU countries and EFTA countries. All persons involved in mobility (4 students, 3 - staff and 9 teachers) were very satisfied with preparation for mobility, organization and mobility realization. But on the other hand they think that the financial support (donation) does not cover the costs, even it is additionally supported by faculty and from this reason they had to cover the part of costs from their own account. The faculty did not offer any foreign language courses because it is expected that everybody is able to communicate without problem in English at least. The mobility was very good organised (14 persons were very satisfied). The mobility helps them by networking (institutions, teachers, students) as well as by intercultural experiences (skills in intercultural management, intercultural human resources management, intercultural negotiations etc.). With the aim to encourage the others for mobility they presented their mobility experiences. All of them were very satisfied with mobility coordinator at the faculty.

5   CONSLUSION

Internationalisation and mobility should have well-defined learning outcomes to help the professors, staff and students, work on their international competencies through-out the curriculum. In 2020, 20 per cent of European graduates must have either studied or taken work experience abroad. The goals, which will be outlined in a communique, are expected to focus on three overall themes: quality education for more young people, increased employability and strengthened student mobility. The aim of strengthening student mobility will be reached through a number of initiatives that promote students' opportunities to study abroad. Countries will work to remove barriers to mobility in relation for example to visa regulations, crating better opportunities for work and residence permits, language education, funding of study abroad periods and the assessment of international qualifications. Our research indicated that the biggest private commercial and economics faculty in Slovenia has implemented all requested activities which refer internationalisation, mobility, sustainable education which are integrated into its strategy. Faculty continuously evaluate and reports about its internationalisation and mobility process. Based on findings of the evaluation, this paper outlines a mixture of recommendations and ideas on several levels: national, institutional and operational. The basic characteristics of the integrated programme are: a more substantial programme, a simpler programme and a more decentralised programme. The European Policy Statement (EPS), a specific instrument which the Commission has implemented to encourage institutions: to adopt a coherent policy for their European co-operation activities and to achieve a more durable impact and to ensure more effective use of available found. The requirement to submit an EPS encourages institution to clarify, negotiate and communicate their vision and strategy regarding internationalisation. There is sample evidence that the EPS indeed supports this process.

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DESTINATION MANAGEMENT ORGANISATION IN FUNCTION OF ENABLING AN INTEGRATED DESTINATION MODEL

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ABSTRACT
Croatian tourism is characterised by an exceptional international orientation, resulting in the fact that major disorders in the emissive European countries' economies are inevitably reflected also on tourism in the Croatian destinations. By enriching tourist contents, competitiveness is stimulated and the economic and financial effects of the subjects involved in the provision of tourist choices of a specific tourist destination are stimulated. As creation of tourist offers consists of many partial participants who offer their own tourist products, it is rational to coordinate the efforts of all partial participants in order to create an integral tourist product. An efficient destination management can have considerable influence on achievement of the sustainable development and on improvement of economic and social conditions for the community, from which emanates a further question: how to successfully activate destination management in Croatian destinations? Article defines and analyses importance of (integrated) quality for development and competitiveness of a destination, starting from global proportions to local dimension of Croatian destinations. The research is conducted to confirm the basic hypothesis which results in defining needed development guideline by most recognized tourist experts. The authors pose basic hypothesis with implication there is no quality management system or planned development in Croatian destinations which prevents possibilities of sustainable (competitiveness) development. Furthermore, the following issues are considered: destination management; systems organisation; relationships, destination's aims and objectives; destination lifespan cycle; adjustments to the European Union, etc. Quoted issues must serve the purpose of adjustment of Croatian destinations to the tourist trends of Europe.

Keywords: *Destination, Destination management organisation, Destination system elements, Integrated management, Quality, Stakeholders*

1 INTRODUCTION

Integration of different quality elements has been widely diskussed topic and there have been different approaches taken as the quality perception and dimensions vary. However it is clear that the quality of any business system, including the destination seen through the economical aspect, depends on the quality of each of its individual element. In the late 90-ies European Union introduced a concept called integrated quality management (IQM) as an initiative founded to encourage development and implementation of sustainable and quality oriented approach to tourism destinations. Although on a theoretical and scientific level the approach was diskussed and analized, it is yet to determine if integration of destination's elements has been fully accepted among croatian destinations in practice. The objective of the paper is to identify the level of integration of croatian destinations with the purpose of achieving a steadily growing

competitiveness on the market as well as to sound the opinion of croatian tourism professionals on the current and needed position of the destinations considering competitiveness of their tourism product, organisational framework and leadership among existing destination models. Article establishes organisational and functional destination managment model correspondent to modern management practice as well as specificity of local environment of Croatian destinations.

2 THEORETICAL BACKGROUND

Each tourist destination represents an integral tourist product, such product being so named due to the fact that it was created as a product of integral planning of tourism in the region of a specific tourist destination.

Destination management necessarily deals with the question of management of resources of a specific tourist destination. Consequently, it is in order to emphasise that under the term tourist destination a particular geographical region, territorial and administrative unit or a specific tourist attraction, offering to tourists experiences ranging from acceptable to unforgettable, can be defined (Bornhorst et al., 2010). From a conceptual point of view, that is if we take into consideration the manageability of a destination, it is far more efficient to regard a destination as a geographical region that has its necessary critical mass or as a cluster attraction, so that the destination can offer its visitors tourist experiences that attracted them into that area. A destination can be regarded as a combination (or even as a brand) of all products, services and ultimately experiences provided locally. It also enables us to assess the impact of tourism regionally, as well as manage demand and supply in order to maximise benefits for all stakeholders (Buhalis, 2000).

Concept Integrated quality management (IQM) was developed by European Comission focusing on the total quality of tourist destination and its integral elements as well as producing benefits to all the stakeolders of a destination. IQM is strategy with the main focus on the cosumers' expectations, while ensuring benefits to four differenet stakeholders' groups: tourism professionals, tourists, local community and enviroment (European Comission, 2000). IQM therefore is a principle that integrates all the destination's elements with the purpose of achieving maximum quality (Avelini Holjevac, 2005).

Content development as an added value to a destination offer is a generator of economic growth (Sucic, 2012). One of the biggest problems here is ensuring the rational use of free public natural resources (for example sea, landscapes, mountains) for the benefit of all stakeholders, with simultaneous preservation of the same resources for future generations.

3 RESEACH METHODS

The research is conducted to confirm the basic hypothesis which results in defining needed development guideline by most recognized tourist experts. Upon examination of up to date researches and papers, the following hypotheses are set.

H1: There is a significant lack of management and organisation throughout croatian destinations and the focus shall be put on creating synergy and partnership among stakeholders

H2: DMO should represent a destination leader in croatian destination as a flexible body enabling s clear development policy through structural management with focus on processes which is not a current reality.

H3: Successful destinations carry out destination branding and monitor the stakeholders' role, i.e. their significance for the destination management.

H4: Legal, political and organisation framework is crucial to developing solid platform of destination' system elements and is a wide improvement area.

H5: Researchers' interest in the topics of policies and strategies in destination management contributes to the destination development.

In order to sound the opinion and attitude of Croatian destination stakeholders, a survey has been carried out among tourism professionals (representatives of public and private sector – hotels, travel agencies, destination entrepreneurs, local authorities etc) examining the attitudes and opinions they hold of DMO, needed organisational and legal adjustments as well as destination elements to build destination networking on. Survey was carried out in the period from 2009 until 2011 and the research was executed as a part of doctoral studies of one of the authors and consequently adjusted and developed for the purpose of this paper.

Two major phases of the research were conducted: survey analisys as well as the processing the carried interviews. Based on results given by both phases a basic chart was created and conversion to SPSS was conducted along with the description of certain variables as well as its modalities. Both descriptive and inference statistical analisys were carried. Inference analisys was mainly based on h-quadrant tests, all variables of the survey being nominal. Besides, there were t-test as well as f-test used to define arithmetic mean and for the smaller independent patterns the differences tests were conducted. To given results there were interview conclusions added and commonly they represent indicative information through several interactive sessions, questionnaire and interview phases and are concised and presented in this article.

4 RESEARCH RESULTS - MEASURES

Groundwork of the research process is represented by empirical research executed on a representative sample of 12 coastal destinations in Croatia. Sample consists of the following destinations: Poreč, Umag, Rovinj, Rijeka, Crikvenica, Zadar, Šibenik, Vodice, Split, Makarska, Hvar and Dubrovnik. Criteria of the sample selection was share of the arrival and overnight proportion to the overall arrival and overnight results in Republic of Croatia. Complex research was based on an experts' analysis through different scientific methods such as survey and interview. The aim was to determine standpoints of different critical populations: mayors office and local authorities, local tourist board director, regional tourist board director, directors and managers of few destinations' biggest travel agencies, several tourism operation representatives (e.g. employee of the hotel, restaurant or a local entrepreneur), director or manager of few destinations' hotels. The goal was to define positions and judgements of main destination's tourism creators whose critical expertise could define the needed development directives.

Questionnaire used during the research was divided into 3 main sections: 1st that would define behavioural characteristics of participants, 2nd that would determine the existing level

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of destinations' organisation setup as well as presence and potential of creating synergy and partnership models and 3rd that would define level of implication of destinations' quality models to sustainable competitiveness development. Analysed research results are presented in the following text.

Questionnaire was carried out mainly by representatives of private sectors and there was a significantly low response rate from the local sector population. Main part of the examinees belong to the micro and medium teams, 83% of them. Among private sector 28 % of the examinees belong to foreign companies which indicates ownership structure (mostly in hotels companies, to be presumed) across the coast. Chart 1 shows business function and role in tourism activity of examined destinations' representatives.
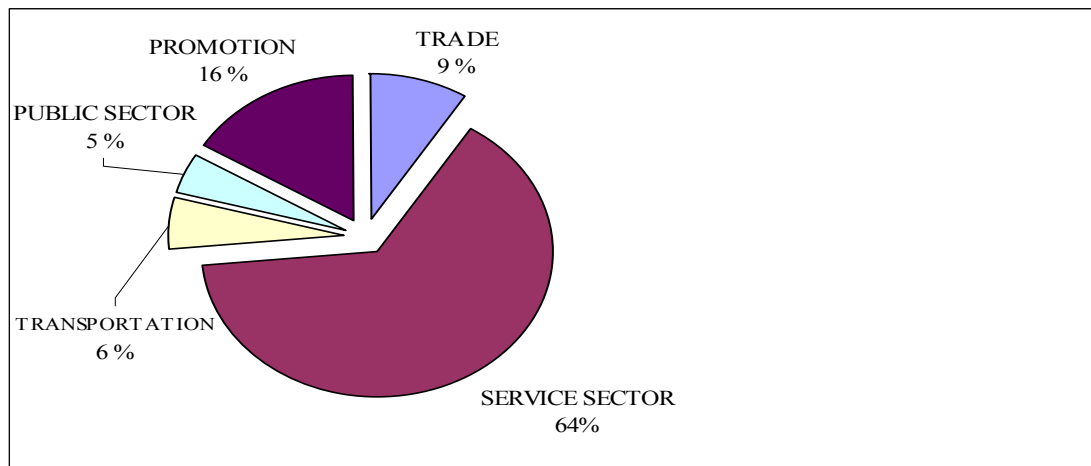
Chart 1: Examinees' distribution among business sectors

Once the structure of each population was analysed, one of the main objects was to determine whether in Croatian destinations partnership and longterm quality plan is incorporated. The results are rather indicative as the great majority of examines agreed that there is no any form or framework of partnership models existing in their destination. Mentioned results are shown in Chart 2.
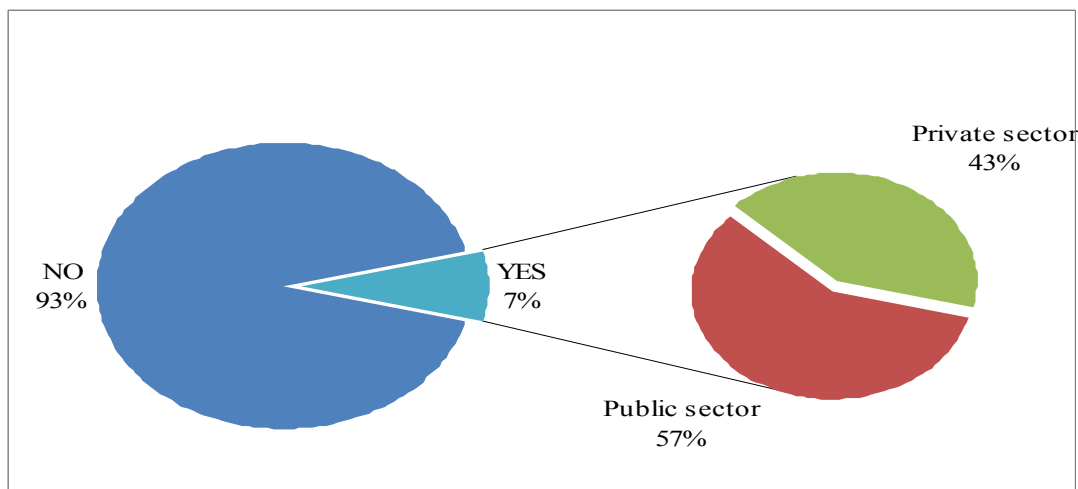
Chart 2: Presence of quality and partnership models in croatian destinations

Chart 2 is indicating extremely negative standpoints among tourism professionals to the existing models and organisation patterns of the destinations. Emphasized minority of examinees believed that there is a sufficient level of partnership in the destination, but if these questionnaires are further analysed it is interesting to find that there is predominant population of 57% belonging to a public sector.

Further examination of the existing cooperation models between destination stakeholders indicate that there is no suitable form of cooperation nore leader to reach common goals, but there is a certain indication that the existing and potential leader should be entity of tourist board.

Almost 34% of the participants believe that the leader of their destination is hotel structure which can be related to destinations with high presence of major tourist chains. For the further analysis, it is crucial to stress out the noticed will and motivation throughout the populations for the creation of partnership forms that would result in building a quality strategy and development plan. Eventhough 79% of the examinees showed their knowledge of the modern European management practices, there is still considerable portion of them (21%) who do not posses practice nore awareness of the modern tools and theories which is a frightful fact if we take into consideration that experts' analysis was the base of the research. If these numbers are to be analized, 78% of the examinees that do not have the knowledge of IQM, are older then 45 years of age and only 16% of them are under 25 years of age. This forms significant statistical difference ($t = 5,12$ $p < 0,001$) and with 99,9% certainty is to be concluded that the proportion of those experts who do not recognize modern management practices and belong to older population is higher. If the distribution to different sectors is analized, there is 1% of those who do not know IQM and believe there is no quality model in their destination that work in the public sector as well as over 50% of those who believe there is an existing quality model in their destination that work in the public sector. The dirrefence again is statistically significant ($t = 5,47$ $p < 0,001$) and is to be concluded that there is a higher propotion of examinees coming from publich sector who believe that there is a quality management in their existing destionation model.

Destination stekaholders mostly agree (66% of them) that longterm strategical planning is crucial for the destination development and that the focus should be on the common goal and benefits for all steakholder. There is a significant indication that the current destinations' (organisational, legal and political) set up does not correspond to modern European practices. Results brought through the research show that large majority of examinees, over 85% of them, expressed their negative opinion on the existing organisational framework and destination concept as well as the existing partnership level while they hold very positive opinion of the existing resources in their destination and potential to develop a more structural destination body. Over 80% showed their extremely positive attitude toward destination integration led by an institutional leader such as DMO, moreover they feel that the leader should be a public body that could represent common interests and carry out not only the setup development, but a monitoring of the process creation and execution. If this part of the survey is carefully analized, there is a need to confront results of the existing and needed leader of the destination. Comparison of such frequencies was tested by a hi-quadrant and the test data was following (Table 1):

Table 1: Leader of the destination – research results

Destination development leader	Existing	Needed
Tourist board	20	37
Local authorities	5	23
Rest	61	26
Total	86	86

Differences between noted and theoreticall freqeuencies are statistically significant (N = 86 df =2 χ^2 = 69,013 p < 0,001) which indicates an important gap between the existing forms of leadership and the needed ones.

Although an indicative lack of knowledge and information about modern management postulates as well as insight to modern practices was discovered at the certain level, more then 90% of the stakeholders, regardless of the sector they belong to, showed very positive attitude and motivation toward joining to a certain networking model under DMO leadership and they are ready to invest their resources into in project development in order to obtain a clear and strategic development policy of a destination.

By analysing the overall results it is possible to define several general trends that examinees find crucial for achieving increasing competitiveness. Key words to focus on are generally: quality improvement, involvement of all stakeholders and partnership of destination participants, longterm development and sustainability strategy. Mentioned trends confirm the groundbase of integrated quality management as a modern postulate in destinations' organisation. More then 80% of survey participants find the need of the investment to destination's content oppose to structures/accomodation development, stressing out the importance of outlining and creating market strategies creating an added value for the consumer.

Analysis of frequences about the grounbdbase of destinations' competitiveness was also conducted by hi-quadrant test and results introduced significant statistical differences (N = 86 df = 4 χ^2 = 125,24 p < 0,001). The highest frequency difference was noticed at following modalities: «nature resources and attractions» and «content offer». If modality «nature resources and attractions» is analized, expected frequency was 6 and the noticed frequeny was 30 and by modality «content offer» expected frequency as 36 and the noticed frequency was 7. If these results are further compared by different variables, following contingent tables can be formed:

Table 2: Examinees distribution variables vs different research variables (made by authors)

RBB	Variables in contingent tables	Form of conting. table	N	χ^2	df	p	Stat. signif.
1.	Sector distribution Needed base of destinations' competitiveness	2 x 3	86	3,780	2	0,151	
2.	Age distriubtion Needed base of destinations' competitiveness	3 x 3	86	0,704	4	0,951	
3.	Management level Needed base of destinations' competitiveness	3 x 3	86	0,309	4	0,989	
4.	Investement direction Needed base of destinations' competitiveness	2 x 3	86	5,989	2	**0,050**	*

*Remark: * statistically significant up to 5%; ** statistically significant up to 1%; *** statistically significant up to 0,1%*

Results shown in the table indicate there are no statistically significant links between the research results and different paraments of the examinees (age, sector distribution or management level).

On the other hand, there is statistically significant link between modalities about groundbase of destinations' competitiviness and direction of needed investments (p = 0,050). Contingent table test for the mentioned hi – quadrant test follows:

Table 3: Destinations competitiveness vs investment areas – frequencies

Investement areas	Needed base of destinations' competitiveness			Total
	Nature resouces/Accomodation/Gastronomy	Content/Marketing	Rest	
Accomodation capacities	2	9	6	17
Redesign of contents	17	44	8	69
Total	19	53	14	86

Following frequencies can be turned into percentages as follows:

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Table 4: Destinations competitivemness vs investment areas (%)

Investement areas	Needed base of destinations' competitiveness			Total
	Nature resoures/Accomodation/Gastronomy	Content/Marketing	Rest	
Accomodation capacities	**12**	**53**	**35**	100
Redesign of contents	25	63	12	100
Total	22	62	16	100

A further independent analysis was conducted in order to verify hypothesis and the algoritam was formed using six main variables and forming a new one. Following existing variables were used:

o Knowledge and awareness of IQM,
o Knowledge, awareness and existance of quality and competitiveness plans,
o Private-public partnership existance,
o Private-private partnership existance,
o Public-public partnership existance,
o Knowledge level of tourism stakeholders.

Newly formed variable was named «Destination development level (DDL)» by summary of the mentioned six variables, highest possible level being 12 and lowest possible level being 6. Summary of the existing variables follows:

6   0 examinees
7   0 examinees
8   5 examinees
9   14 examinees
10   35 examinees
11   25 examinees
12   7 examinees

First 2 points (8 i 9) create one DDL group (higher level group), next point (10) forms another DDL group (medium level group) and another 2 points (11 and 12) create the highest DDL group forming three different modalities of the newly created variable:

- Low DDL (11 and 12 points) – 32 examinees;
- Medium DDL (10 points) – 35 examinees;
- High DDL (8 and 9 points) – 19 examinees.

Additionally, newly formed variable was put into corellation with further dependent variables which showed there was no statistically significant difference, but the given test showed indicative destination development results. Results of the basic research project implicate to an alarming state of destinations' organisation and point out potential development paths. Interpretation of the results confirm the autohors' hypothesis that suggest there is a significant lack of management and organisation throughout croatian destinations as 78% of the destination belong to medium or low DDL and the focus shall be put on creating synergy and partnership among stakeholders.

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Participants do not only find it cruicial, but they show significant level of motivation to form a common body under whose leadership the changes would be undertaken. Existing entities of tourist board present a possible destination leader which would need to go through organisation and structural changes meanwhile political and legal environmental changes should also occur.

Results show the existing resources thoughout Croatian destinations with a great potential for an increasing destination competitiveness trend once the solid and integrated destination model is achieved. The Tomas (Čorak et.al., 2009) research by the Institute for Tourism shows that competitiveness is not built only on the price, but on the attempt at removal of competitive weaknesses, namely:

- Experience at the destination (versatility of special events, culture, entertainment, sport, possibility for shopping),
- Destination atmosphere (equipment and appearance of beaches, tidiness/landscaping of public areas),
- Destination functioning (information at the destination, transport and marketing).

So called quality destination chain, within the existing potentials, is crucial and possible in order to achieve longterm competitiveness, however focus on the ground and more basic organisational model is needed as a platform for integration of destination elements.

5 DISCUSSION

The research shows that the existing destination models need to face a significant organisational swift into more flexible form that is able to adjust to ever-growing and ever-changing market needs as well as to carry out a basic and longterm development strategy. The existing legal and operational borders should expand in order to reduce administration cost and speed up decision and operation chains. There is a suggestion for a *new zone destination model (NZDM)* that could carry out destination development of a wider area regardless of current administration framework. NZDM would be supported by current county tourist boards transformed into so called *destination management units (DMU)* as well as local tourist boards transformed into *destination management operation centres (DMOC)*. Suggested model has three main vertical management levels (macro, mezo, micro) and it would represent a turning point into a modern concept of tourism management organisation.

Even though designing an optimal destination model is implicating a detailed analysis article could represent a guideline and contribution to destination management development. The objective of destination quality management and the purpose of integration is no other than enlarging destination values into the total destination product with appropriate standards which will be long-term sustainable and competitive.

On the way to the destination integration, the key of the aforementioned efforts is lifelong learning, persistency and faith into a shared vision. Investments to education, knowledge sharing is crucial. Recommendations given in the paper hold positive effects for both private and public sector: stronger appearance on the market, costs reduction, sharing information and knowledge, sharing of tools, ideas and technologies. A leading body such as DMO should represent the source of changing trend.

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WOMEN ENTREPRENEURIAL NETWORKS AND SMALL BUSINESS DEVELOPMENT: A STUDY BASED ON TOURISM INDUSTRY IN SRI LANKA: ONGOING RESEARCH PROJECT

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ABSTRACT

This study aims to explore the role and impact of women entrepreneurs' networks on small business performance and examine the importance of factors that are perceived by women entrepreneurs to influence the process of networking. The focus of the study is in the field of networking of entrepreneurs and it is concerned with the main theoretical and practical perspectives of entrepreneurial networking .While women's entrepreneurship is a central aspect of economic development and public policy concern in most countries, scholarly research about their entrepreneurial activities is comparatively scarce. This study specifically focuses on women entrepreneurs who engage in tourism industry within the small business sector in Sri Lanka. This study adds to the extant literature through its two-dimensional focus on entrepreneurial networking. The structural dimension which investigates who are parts of the entrepreneurial networks; the relational side which explores the contributions each tie brings to the entrepreneurial venture. Having established that a qualitative methodology is most suitable for this study, the in-depth interview and observation are deemed a particularly suitable research tools. Narrative approaches are suggested in order to "tap" the voice – and thus the stories – of the acting entrepreneurs.

Keywords: Narratives, Networking, Small business, Tourism industry, Women entrepreneurs

1 INTRODUCTION

Networking is an influential tool by which entrepreneurs use a wide variety of contacts to help them achieve their business and professional objectives and it gives them greater access to information, resources, new clients and people with similar business interests so on (Ascigil and Magner, 2009; Barnir and Smith, 2002). Networking is mostly important for women, who generally have more limited access to information and business contacts, whether through various membership such as trade organisations, business networks and business clubs. Traditional role patterns continue and the combination of running a business and managing the home leaves little time for other activities (Loscocco et al., 2009; Mand, 2006; Maclean, 2010). Unlike most male counterparts, many women entrepreneurs combine setting up and running a business with managing the household (Maclean, 2010).

The rise of female entrepreneurs has involved academic interest and female entrepreneurship has developed as a separate research field (Tulus, 2009). Academic interest in female entrepreneurship is inspired by both the economic and equality implications of the occurrence. Given the fact that entrepreneurship is considered as the main source of economic growth, employment, poverty alleviation, regional development and innovation, women are a readily available resource that countries at different stages of economic development may use to accomplish economic progress (UNDP, 2011). Indeed, Tulus (2009) revealed positive relationship between the female share in entrepreneurship and economic performance at both country and regional levels.

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Entrepreneurial networks, as an important strategy for the development of small business sector, are increasingly the focus of attention for entrepreneurs, public authorities, policy makers and academics (Sherre and Keith, 1997; Audrey and David, 2006; Premarathna, 2001). For example, a number of researches (Premarathna, 2008; Daniel 2010; Yee 2011) have studied the importance of networking in entrepreneurial success. Networking linkages can be seen to be important for small firms. The need for external assistance to strengthen an often weak base of resources is even more crucial in the case of the small business sector in many countries. Therefore; it is difficult for many small organizations to survive without any support from the network actors.

Over the past few years much has been written about the rapid spread of various types of firm networking, the area of women entrepreneurs' networks and small business entrepreneurship is still a challenging research field. This study is devoted to explore the role and impact of women entrepreneurs on small business development and effect factors that are perceived by women entrepreneurs for their networking relationship.

Networks can be defined as personal relationships between an entrepreneur and his 'external actors' (Robinson, 2007; Birley, Cromie and Myers, 1991). The external actors (outsiders) can be individuals or organizations. Entrepreneurs build up such network relationships (contacts) in order to obtain necessary resources and to perform activities

2   BACKGROUND TO THE STUDY

Small business enterprises play a vital role in the economies of both developed and developing countries, representing well over 60% of all manufacturing enterprises in the world (Michael and Markarues, 2009; Kodithuwakku, 2008). This sector constitutes 95%, 97.3% and 85.5% of all businesses in United Kingdom, New Zealand and Australia respectively (Kodicara, 2008). The small and micro enterprises play a major role in the Kenyan economy and according to the Kenya National Bureau of Statistics 2007, the sector contributed over 50 percent of new jobs created in the year 2005 (Michael, Makarius and Samuel, 2009). About 98% of enterprises in most Asian countries are classified as small enterprises and they make contribution heavily to total employment in any nation frequently representing more than 50% of total employed (Geoffrey, 2009). Small and medium enterprises in Pakistan in 2005 contributed over 30% to GDP (Muhammad, 2007).

The role of the Small business sector has become very significant and they have been identified as an important strategic sector for promoting growth & social development of Sri Lanka. Over the years, this sector has gained wide recognition as a major source of employment, income generation, poverty alleviation and regional development (White Paper: Task Force, 2009). Small business Enterprises play an important role in job creation; this is evident from table 1 which captures the employment generated by micro (<10 persons) and small and medium enterprises (10-99 persons) as published by the Department of Census and Statistics (DCS).

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Table 1: Number of persons engaged in micro, small and medium enterprises, 1992-2005
(DCS Annual Survey of Industries 2003, DCS data 2007)

Size	Persons engaged									
No of Persons	1992		1993		1996		1997		2005	
	No:	%	No:	%	No:	%	No:	%	No:	%
<10	2,911	1	3,002	1	46,995	9	48,225	10	53,352	11
10-99	44,406	15	48,389	14	119,146	22	113,408	23	190,638	17
Total	292,736		345,036		536,913		495,355		1810475	

From the inception of industrialization of the Sri Lankan economy, small business sector was recognized as an important sector to be developed. But the progress of this sector was not up to expectation and it had high failure rate and they are continuously facing various problems such as lack of finance and other resources, networking, marketing etc. (Premarathna, 2002; Rathnayake, 2006). Considering table 2 it can clearly be identified that number of small business establishments is very high but value added is very low when compared to the three other sectors. Therefore, the contribution of small business sector to the national economy in Sri Lanka is still low when compared with the other developed and developing countries. Nevertheless, according to recent available statistics from various sources, the small industries are much more labor intensive than larger industries. For instance, their capital-labor ratio is less than one-third of that of manufacturing as a whole. The productivity of the sector is considerably lower (Premaratna, 2001).

Table 2: Servicers classified by persons engaged, 2008 (DCS , 2009)

Size-No of persons	No of establishment	No of persons	Out put	Value added
<10	39.2	2.9	0.7	0.6
10-39	36.8	7.6	4.1	4.2
40-99	12.1	8.4	5.7	5.5
100 above	11.9	81.1	89.5	89.7
All	100	100	100	100

In this setting, many researchers have considered these problems and they have found out various constraints such as finance, lack of planning and networking (Premarathna, 2002, 2005; Rathnayake, 2006; Selvamalar, 2005). Nevertheless, the ideal solution is not yet up to expectation. Moreover, some researches into small-business development revealed that the rate of failure of small scale businesses in developing countries is higher than in the developed world (Marlow, 2009).

Tourism is an industry that depends on synergy, partnership and working together. Therefore, the network approach is highly relevant to the study of tourism industry. There should be strong linkages existing between tourism with the other external bodies to survive in the field. Outsourcing, subcontracting or other linkage arrangements between businesses in hospitality industry and other external actors are crucial means of developing small enterprises. For

tourism to be beneficial in terms of income generation, economic growth, employment generation, poverty alleviation, and rural development, it has to be linked to local economies such as agriculture and micro and small scale enterprises (Patience and George, 2009).

The economy of the Sri Lanka mainly depends on plantation crops, apparel industry, tourism and foreign employment. Tourism has been a dynamic income generation source for the Sri Lankan economy by now. Tourism continued its position as fourth largest foreign exchange earner even in the year 2009 and the portion of tourism's contribution to foreign exchange earnings in 2009 amounted to 2.6% (*SLTDA*, Annual Statistical Reports 2009). The political and economic stability has arrived after period of 30 years waging war and it can be clearly seen strong green light for the industry to grow at a very fast rate as never in the history before. Blessed with around seven world heritages named by UNESCO, Sri Lanka is considered to be one of the most important cultural and biodiversity hotspot areas of the world though it is a small country. This symbolizes that the island is having immense possibilities and potentials in converting the destination towards a center in attracting more and more tourists and it will result in attracting foreign exchange as well as nurturing new ventures related to the industry.

The Sri Lanka Tourism industry depends heavily on its Small Enterprises and many Establishments are sole proprietor or partnerships (SLTDA 2011).

Table 3: Composition of tourism business in 2011 (SLTDA 2011)

Business type	Total establishment	Small		Medium and Large	
Hotels and boutiques (39)	287	202	70%	85	30%
Guest houses	497	386	78%	111	22%
Restaurants	357	279	78%	78	22%
Travel agents	559	458	81%	101	19%
Homestay units	71	41	100%	0	-
Bungalows	36	26	100%	0	-
Shops	140	107	76%	33	24%

The figure (table 3) says that more than 75% of tourism businesses belong to the small category. According to the SLTDA, in 2011 there were close to 1907 tourism-related businesses throughout the country, with 57 786 people employed in jobs directly related to tourism while indirect employment was 80 899.

2.1   Sri Lankan women entrepreneurs and their network relationship

Considering the average rate of business start-up from 1998 to 2002 , it can be noted that the number of women entrepreneurs' rate (0.8%) is low compare to their male counterpart (2.5%) in Sri Lanka (UN, 2003). Moreover, typical woman entrepreneurs' business enterprises are very small, with low turnovers, a low number of employees and no professional assistance (UN, 2003). In the process of entrepreneurship, women have to face a greater ranging of problems associated with entrepreneurship, than men, and these problems can be doubled because of her dual role as a wage earner, and a homemaker (Selvamalar, 2005).Women in entrepreneurship have been largely neglected both in society in general and in the social sciences. Not only have women lower participation rate in entrepreneurship than men but they

also generally choose to start and manage firms in different industries than men tend to do (Brush, 1992). Women entrepreneurs play a non-trivial role in the economy, they face challenges and obstacles different from those faced by men and they act differently (UN, 2003).

Sri Lankan women entrepreneurs have fewer business contacts and lack knowledge of how to deal with the supporting organizations. Moreover, most women entrepreneurs operate on a small scale, and are generally not members of professional organizations or part of other networks in Sri Lanka (UNESCAP, 2005; Tules, 2009). Most existing networks are male dominated and sometimes not particularly welcoming to women but prefer to be exclusive (Premaratna, 2002; Thirkawela, 2011). Even when a woman does venture into these networks, her task is often difficult because most network activities take place after regular working hours. Lack of networks also returns women's awareness and exposure to good role models. Few women are invited to join trade of missions or delegations, due to the combined invisibility of women-dominated sectors or subsectors and of women as individuals within any given sector. As an example of this, at a small and medium enterprises trade fair among south Asian countries held in Sri Lanka in 2004 where it has been estimated than women operate around half of all SMEs, less than 20 women were registered among the approximately 250 participants (UNESCAP, 2005). Information is a most important resource for women entrepreneurs. Because, information can relate to markets, suppliers, costs and technology, and networks have emerged as key strategy for giving support to women entrepreneurs. Networking is very important to the success of a business, and it is identified as one of the key ways to strengthen women's enterprises as it can provide access to information, new customers and suppliers (UNESCAP, 2005; Mya, 2011).

In most of the Asian countries like Sri Lanka women are viewed as weak, passive, obedient or submissive. Furthermore, dominant religious beliefs and traditions do not favour women being involved in outside activities. In some cases society has some stereotype such as weakness in a man if his wife is working in business. When women are involved in business activities, they have to deal with many people, and sometimes travel away from their homes and participate in business parties like cocktail. Such things are not well accepted by Asian societies (Ranasingha, 2009; UNESCAP, 2005; Ram and Seela, 2010; Surangi, 2010; Surangi, 2008).

Business enterprises have contacts with a number of groups. These parties can be social networking, commercial networking and profesional networking.According to the research findings women entrpreneurs prefer especially to keep social networking with friends and relatives compared to their male counterparts in Sri Lanka .In contrast, majority of male entrpreneurs prefer to have close connections with commercial networking (Surangi, 2010; Wasanthi, 2011).

Sri Lankan society is still patriarchal and Sri Lankan women are traditionally considered homemakers and not businesspersons. In a previous stating, the majority of woman mentioned that they received excellent or good family support for their business and they said that it is difficult for them to manage the entire business without the help from male counterparts (Surangi, 2010; Rathnayaka, 2006). Women's family obligations also bar them from becoming successful entrepreneurs in both developed and developing nations (Botha, 2006). Having primary responsibility for children, home and older dependent family members, few

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women can devote all their time and energies to their business. Moreover, business success depends on the support extended by family members (Surangi, 2010).

3   OBJECTIVES OF THE STUDY

Researchers have interpreted gender differences in network composition as posing a disadvantage for women in the business world and weak ties are the source of male entrepreneurs success (Foss, 2010; Kristina, 2010; Wendy and Doyle, 2001). Women who include greater proportions of kin and female in their discussion networks may secure greater social support than men, but at the cost of sacrificing the necessary instrumental support needed for economic achievement (Klyver, 2007, 2011). Social support provides the emotional strength owners and managers need to cope with daily exigencies, but such ties may also limit the diversity and reach of women's networks. Women's networks tend to be more limited and to focus on family and friends whereas male entrepreneurs have wider networks (Chirs et al., 2011). Taken that as given, this study attempts to achieve the following objectives.

1. To explore the role and influence of women entrepreneurs' networks on small business performance
2. To examine the importance of factors those are perceived by women entrepreneurs to influence the process of their networking.

4   RESEARCH QUESTIONS

To achieve the research objectives, the study seeks the following research questions.

1. Why and how women entrepreneurs form their networks?
2. What is the contribution of each network actors to the development of small businesses?
3. What are the influencing factors for women entrepreneurs' process of networking?

5   RESEARCH METHODOLOGY

Given the limited understanding of the role of the women entrepreneurs' networks in the small business development, a qualitative research method will be considered the most appropriate, as it is useful in areas that are not well advanced theoretically. Therefore, this study is exploratory in nature and data are qualitative. Consequently, the research process of this study is inductive rather than deductive. Thus, this study adopts a phenomenological approach to obtain a deep understanding of entrepreneurs' experience of their networks, revealing the impact of these network relationships on the small business performance.

Having established that a qualitative methodology is most suitable for this study, the in-depth interview and observation are deemed a particularly suitable research tools. The in-depth interview enables the researcher to understand other persons' "constructions of reality", by allowing interviewees to respond in their own language .The interview type, which will be chosen for this research, can be referred to as semi- structured. Completely unstructured interviews are considered inappropriate due to the risk that the interviewer would fail to collect the desired information .On the other hand, the imposition of too rigid a structure on the interview might have inhibited the flow of information and might have prevented the emergence of useful and revealing insights.

The sampling frame of businesses in the hospitality sector in Sri Lanka will be obtained from list of divisional secretarial offices and tourist board. The lists included some basic information such as date of registration, type of business (hotel, guest house, restaurant, travel agencies, shops etc.) as well as their contact details. Purposive sampling method will be used to select entrepreneurs.

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Narrative approaches are suggested in order to "tap" the voice – and thus the stories – of the acting entrepreneurs. To analyze data the interviews will be taped and the transcripts will be analyses with the help of NVivo software to identify emergent themes.

6   CONTRIBUTION TO KNOWLEDGE

The purpose of this research is to study the role of entrepreneurs' networks and its impacts on small- scale business performance that run by the women entrepreneurs in Sri Lanka and influencing factors for women entrepreneurs networking process. Entrepreneurial networking and small business development have been a well-researched area by scholars for many years especially in developed countries. But, there were few studies carried out to examine the relationship between entrepreneurial networking and business success in Sri Lanka. In the networking literature, women entrepreneurs are under researched area in both developed and developing countries and there is limited academic research with empirical material on this topic specifically focusing on women entrepreneurs in Sri Lanka. As an attempt to fill the gap this study will examine how entrepreneurial networking among women entrepreneurs impact on small business growth in Sri Lanka.

Much of the research on entrepreneurial networks is concerned with structural characteristics. The connectionist perspective studies are mainly concerned with the content flowing across network relationship (Sullivan, 2006). In the present work, researcher considers both structural and connectionist perspectives to be important. Apart from structural and connectionist perspectives, the research on entrepreneurship has emphasized influencing factors of the networking process for women entrepreneurs (Johannisson, 2000; Zhao, Frese and Giardini, 2005). Most social network studies focus only on the outcomes of networks (e.g., business growth) rather than on their influencing factors. In this study, the researcher will concentrate on the influencing factors for women entrepreneurs' networking process, in particular, on how women entrepreneurs actively enlarge social networks in order to achieve higher business growth. Fewer studies have explored the factors influencing the network process (Zhao, Frese and Giardini, 2005).

The objective of this research is to gain an understanding of the networking process in which women small firm owner-managers engage. It has been noted that, while much research has been undertaken to discover the structure of small firm networks, less is known about the influencing factors for women entrepreneurs networking (Moghli and Muala, 2012). Such a situation has been explained by the fact that structural dimensions of a network are eager to quantitative methods, and accordingly, these have tended to dominate small firm research to date .However, it has been stated that the understanding of networks proffered by such quantitative methods is limited and in some cases, confusing and this research will adopt a qualitative methodology.

Moreover, this study is worth to academic research and policy development because of the significant contribution these businesses could make to economic development, employment generation of the country.

The finding of this research work is significant for several reasons. Most importantly, this research work will throw more light on the issue of networking of women entrepreneurs in the Sri Lankan economy. The result of this study will help consultants, researchers and policy makers on women entrepreneurship to understand the role of entrepreneurial networking and

its impact on the small business development better so as to help women to make supported business decisions. The result of this study can help women entrepreneurs who are seeking information and resources on how to handle their business. It will create an opportunity for further research on motivation and women entrepreneurship, small business sector and tourism industry.

7   CONCLUSION

In summary, despite the research attention on entrepreneurial networking in recent years, prior work has tended to focus on how actors connect (structural dimension), however, there is a lack of research about the resources actors can potentially gain access to by examining with whom they connect and what resource they have (relational dimension). Therefore, while the study of the structural dimension of networks has been found to disclose variations between male and female business owners, there is still a lack of research into the relational dimension of networks which may uncover differences in resource mobilization. Moreover, few studies have acknowledged the impact of gender on networking experiences (Garcia and Carter, 2009) .To date, researchers focus to study gender differences in entrepreneurial networking (Klyver, 2007; Batjargal et al., 2009; Miller, Besser and Riibe, 2007; D'Exelle and Holvoet, 2011; Foss, 2010; Garcia and Carter, 2009), but very little research has been conducted specifically focus on women (Sappleton, 2009; Roomi, 2009; Tsuchiya, 2010). In addition to, it can be clearly seen that quantitative research are dominant in networking literature. In all respect, this research is a preliminary step towards filling this academic gap. In addition to, the controversial evidence of women entrepreneurial networking identified by the academic literature and the shortcomings of the existing research in women entrepreneurs' networks provide compelling reasons for further research on women entrepreneurs' networks in entrepreneurship in a transition context.

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ENVIRONMENTAL INSURANCE AND BUILDING CSR

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ABSTRACT
Development of industry and technological civilization in the nineteenth and twentieth century and extensive use of natural forces in the activities of many enterprises contribute to the (excessive) abuse of the environment. Using of forces of nature in extensive way not only presents a risk for human health or life, but it is also dangerous for the environment. In order to increase liability for environmental damage the Directive 2004/35/CE of the European Parliament and of the Council of 24 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage was implemented. This document established a framework for environmental liability based on the „Polluter Pays Principle" with a view to preventing and remedying environmental damage. As a consequence of new liability regime, the legal environment of business has changed. In fact it turned out that risk management tools like standard General Liability insurance used so far are not sufficient anymore. This issue should be treated as a challenge by insurance sector that will aim at developing specialist insurance products like for example Environmental Impairment Liability (EIL) Insurance providing the protection for entrepreneurs who use the environment. The aim of the study is to present this type of insurance. Analysis of the literature led the authors to the hypothesis that EIL insurance could be a response to the legal requirements as well as (it could be) a part of Corporate Social Responsibility used by rising number of companies. CSR is defined as the way in which companies take into account social, environmental, and economic concerns in all of their activities. Building corporate social responsibility on this idea can increase demand for EIL insurance on the one hand and meet CSR's objectives on the other.

Keywords: *Corporate social responsibility, Environmental damage, Environmental impairment liability (EIL) Insurance, Environmental liability directive, Polluter pays principle*

1 INTRODUCTION

Introduction of the Directive 2004/35/CE of the European Parliament and of the Council of 21st April 2004 on environmental liability with regard to the prevention remedying of environmental damage[1] caused changes to the legal conditions of companies embedded in the natural environment. Implementing the Environmental Directive into the legal system of the EU countries has increased environmental liability with regard to prevention and remedying of environmental damage. According to the research conducted by FERMA[2] most companies are not aware of the impact of the new law on their operations. Mere 56% of the 68

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[1] Further called the Environmental Directive.

[2] Federation European of Risk Management Associations.

researched firms[3] know exactly how the aforementioned Environmental Directive has been implemented into their legal system (Sonigo, 2012).

According to the Directive, damage is a measureable adverse change in the natural resources or a measureable, direct or indirect, impairment of usability of these resources. The following article aims to present one of the methods of environmental risk management, namely Environmental Impairment Liability (EIL) insurance. A comparison of a standard civil liability insurance of company operations and property and an independent civil liability insurance against environmental damage shows that the latter provides a significantly broader coverage and fulfils the obligations imposed on the companies by the legislator to a much larger extent.

Moreover, as the authors believe, this kind of insurance may be a proper reflection of the more and more frequently stated corporate mission objectives related to CSR (Corporate Social Responsibility) policies.

2   CORPORATE SOCIAL RESPONSIBILITY

Corporate social responsibility can be described as a company's voluntary consideration of environmental and social problems in commercial operations and relations with the interested parties which exceeds the minimal legal requirements. The definition included in the ISO 26000 document published in November 2010 by International Organisation for Standardisation states that social responsibility is a company's obligation to include social and environmental aspects in decision-making and to take responsibility for the impact of these decisions on society and environment (Społeczna odpowiedzialność przedsiębiorstw, CSR, 2011). Although the latter area is not mentioned by company representatives as particularly relevant to company development, its importance for the society in general cannot be underestimated.

Another definition can be found in the so called Green Paper[4], where CSR is defined as a concept according to which "companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (Green Paper, 2001, p. 6).

What caused CSR to develop was in particular the increase in ecological awareness and growth of ecological movements. In the 1980s chemical industry was severely criticized, especially in the aftermath of the Bhopal catastrophe in central India. As a result of methyl isocyanate leakage from Union Carbige pesticide plant in a densely populated area approx. 15,000 people were killed and 0.5m were injured. As a consequence of this and similar incidents governments were reluctant to give permissions to build new plants, local communities protested against them, while many highly qualified workers sought jobs in other lines of business. In response to these problems as well as in order to protect their position, chemical companies initiated a program called "Responsible Care". At present it embraces companies which generate about 85% of overall global chemical production. The program encourages environmental management activities, promotes industrial health and

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[3] 95% of the researched companies generate more than €50m in turnover.

[4] Green Paper is a series of reports published by the Commission regarding various areas of politics. They are mainly addressed to the interested parties, organizations and private individuals who have been invited to participate in conferences and debates. (http://ec.europa.eu/information_society/tl/help/faq/index_pl.htm).

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safety, improvement in transparency and dialogue with stakeholders. Similar activity can also be seen in Poland, where it is coordinated by Polish Chamber of Chemical Industry and gathers the largest companies in chemical business (Gasiński and Piskalski, 2012, p. 14).

The above example is just one of the numerous types of activities taken up by companies, which are aimed at reaching CSR objectives. Companies are becoming increasingly interested in CSR strategies. "KPMG International Survey of Corporate Responsibility Reporting 2011" shows that social reports are issued by a growing number of organisations: 95% out of 250 largest global companies publish reports on their socially responsible activities, which is an increase from 80% in 2008 (KPMG International Survey of Corporate Responsibility Reporting, 2011, p. 6).

One of the CSR related solutions may be civil liability insurance against damage to the environment. It is particularly important for companies which use natural forces in their activities or for those whose operations may cause damage to the environment.

3 ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE BASED ON THE EXAMPLE OF THE POLISH INSURANCE MARKET

A growing number of companies are becoming aware of the impact of failure repair cost and possible penalties for polluting the environment on the company financial condition, in extreme cases even leading to its bankruptcy. The main sources of costs are related to cleansing the damaged area, paying the compensation to third parties and individuals, reconstructing and rehabilitation of the contaminated ecosystem and restoring biological balance. Additional costs may be connected with court trials and legal defence. In an attempt to meet the rising demand for financial methods of environmental risk management, insurers offer a few possible options of protection against environmental damage. Polish market offers the following products: environmental clause which broadens the scope of civil liability insurance of company operations and property, protection against environmental damage within the automobile civil liability insurance, environmental guarantee and an increasingly common, though available for a relatively short period of time, specialist environmental impairment liability insurance (Wedziuk, 2012). The first and the last deserve more attention from the point of view of any company. The act on environmental damage prevention of 2007 implemented into the Polish law the Directive 2004/35/CE which introduces liability for environmental damage in a much broader scope than what is covered by the protection of the clause within standard civil liability insurance of company operations. The main difference consists in that the clause only covers sudden and accidental events, while the environmental damage civil liability insurance provides protection from gradual and continuous events, also called gradual release, resulting from business activity. A sudden event refers to a short period of time, mostly 48 or 72 hours, during which emissions of harmful substance and the resulting damage must become apparent. Opposed to that, independent environmental insurance may even cover historical damage due to the introduction of retroactive period (Wedziuk, 2012). Therefore, it can be seen clearly that the environmental clause may cover merely a small fraction of the damage, and as it is only limited to the short period of time of the damage occurrence, the compensation may not suffice to pay all the damage-related expenses. It is also vital that the clause in question protects third parties exclusively, covering personal and property damage, as well as the costs of damage residue repair. It does not include the property and business affairs of the author of the damage. On the other hand, the EU Directive on environmental liability of 2007 and the respective Polish Act on environmental damage prevention and remedying puts responsibility on the entities operating within the environment

for both damage caused to the third parties and to the natural environment, including the cost of restoring and reconstruction of protected species and habitats, groundwater or surface water, and soils (EnviroPro, 2011). It is again worth noticing that EIL insurance damage has a far broader scope than the standard civil liability insurance including the environmental clause. It is also important to remember that liability within the EIL insurance does not require the aggrieved party to be identified and the compensation claim to be submitted to the insurer. The insurance company covers the particular costs imposed on the insured by way of an administrative decision (Wedziuk, 2012). Table 1 shows the main differences between the two products.

Table 1: Main differences between civil liability insurance and environmental insurance
(Cameron, 2010)

Category of comparison	General Liability	Environmental
General Coverage Available	NO GL policies only respond to Sudden and Accidental Events	YES
Gradual Release	NO GL policies only respond to 3rd party claims for damages. Does not cover 1st party, therefore any land which is owned by the Insured is not covered	YES
1st party clean-up	NO	YES
1st party business interruption	NO Seeing a growing number of specific exclusions for fauna and flora	YES
Biodiversity	NO GL policies are linked to property damage which by virtue means someone had to have suffered loss to property they owned	YES
The Unowned Environment	NO	YES

The choice of one or the other form of insurance is largely dependent on the type and scope of risk that a given company is exposed to as a result of the business activity it conducts and the technology it uses. In the case of a company which permanently uses dangerous substances it is more beneficial to obtain specialist EIL insurance, including gradual damage (due to lack of time limitation concerning the leakage becoming apparent, releasing the dangerous substance and occurrence of damage). When comparing the two types of risk transfer onto the insurer one should pay particular attention to Insurer's liability exclusions. To present a meaningful example, let us look at the general terms of civil liability insurance of business activities and property of TUiR Allianz S.A. The damage defined by the regulations of Directive 2004/35/CE is directly excluded from the coverage. Similarly, PZU S.A. is not held liable for

any damage regulated by the above directive. STU Ergo Hestia S.A. does not account for the damage directly or indirectly resulting from emission, leakage or any other way of a dangerous substance permeating into the air, water or soil. There are also other exclusions found in both types of insurance:

- damage which occurred prior to the insurance period, also the damage that became apparent before the insurance took effect but the insurance company was not notified about it,
- deliberate fault resulting from managerial action,
- planned or anticipated action resulting from emissions or negligence,
- war or terrorism,
- penalties and fines (contractual, non-compensative, due tax payments, non-financial claims)
- radioactive contamination,
- damage resulting from pollution of the environment where an underground tank is the source of pollution,
- damage resulting from deliberate negligence or conscious and deliberate disregard of summons enclosed in an official, regulatory or administrative letter, violation of orders included in an admonition directed by a Regulatory Body or in a writ, injunction or administrative order directed to the Insured or Officer in charge,
- lead or asbestos contamination.

Unfortunately, it is mainly among large chemical, oil or power companies that environmental insurance is arousing interest. Other companies are hardly aware of the threats and financial liability of the perpetrator for the damage caused to the environment that the environmental act imposes on them. Moreover, they are often certain that, if any damage should occur, it will be covered by the general liability insurance. According to Global Casualty Insurance Programmes Benchmarking Report 2011 45% of the respondents believe that their potential exposure to environmental risk is covered by the current civil liability policy (Global Casualty Insurance Programmes Benchmarking Report, 2011, p. 17).

Environmental Impairment Liability insurance issues are more complex. The main problem refers to the insurers' lack of experience in estimating this particular type of risk and consequent tentative approach to the described product. Insurance companies are therefore more willing to offer civil liability insurance including the environmental clause (usually called the 48 hour or 72 hour clause). Insurers approach risk assessment and calculation of the premium amount in a variety of ways. To name some of them, ACE Group underwriters calculate the premium individually, taking into account the scope and period of insurance, type of business activity, amount of company's own stake as well as damage history. On the other hand, Ergo Hestia pays attention to the amount of revenue the company generates, the level of the insurance liability and the area of industry in which the client operates (Bartman, 2012, p. 22). Besides, insurers assess the population density in a given area, its surroundings, vicinity of water bodies, soil quality. One of the crucial elements influencing risk assessment is materials (like raw materials or chemical substances) processing and storage procedures that the client has in place as well as use of ground-level and underground tanks. Insurers are also likely to ask about emissions, waste management, asbestos-containing materials and preventive measures in case of a leakage. This is why risk engineers often conduct a detailed inspection of the insured plant and ask a large number of specialist questions before they present the final insurance offer.

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The premium amount varies from several to more than ten thousand PLN for a year's long insurance period (amounting to approx. 15 per mille) while broadening the general civil liability insurance may cost up to 30% of the premium that a given company pays for the basic scope of insurance (Wedziuk, 2012).

Another problem connected with supply is that insurance companies are lacking in highly qualified professionals or financial reserves required to manage this kind of insurance product. Co-operation of re-insurers and insurance companies could provide a solution, especially if backed by involvement of National Fund for Environmental Protection and Water Management (whose statutory aim is to facilitate preventive action in environmental protection) in establishment of re-insurance companies. Such co-operation could lead to lowering the premium levels and the resulting growth in popularity of this product among entrepreneurs (Fiedor, 2007, p. 150–153).

Whether it would be possible and legitimate to introduce an obligatory environmental insurance is still another problematic issue, which might lead to an increase in the use of this kind of insurance. Many European countries have already introduced such obligatory insurance, e.g. Germany, Belgium or Sweden (Fiedor, 2007, p. 145). Unfortunately, its scope is rather narrow due to insufficient legal regulations and reluctance of the insurers who have already incurred losses which result from offering this type of insurance.

4   ENVIRONMENTAL DAMAGE ASSESSMENT METHOD

An essential issue related to environmental damage liability insurance is the complex process of damage assessment and adjustment. Occurrence of damage involves many different types of loss and various factors, which must be subject to thorough analysis requiring vast knowledge and experience. Among the required activities one might mention: identifying the source of contamination, minimising the loss and limitation of the damage. They may also involve contamination analysis, and sometimes even modelling animal migration or estimating the progress of the damaged biotope restoration. That is why usually insurance companies outsource the task of assessing particular damage to independent experts. Obviously, this results in increasing the costs incurred by the insurer, which in turn causes the insurers to raise the premium amount.

According to the rule of "the polluter pays", which is the main principle of the Directive 2004/35/CE as well as the Polish act on damage prevention and remedying, the entrepreneur must be held liable for environmental damage or causing threat of such damage resulting from their activities. The 18 point of the preamble mentions three possible ways of charging the costs:
-   costs of indispensable preventive and remedying resources
-   costs reimbursed by the entrepreneur if the competent authority acts on behalf of a company on its own or through a third party
-   costs of evaluating the environmental damage and in some cases the costs of evaluating the direct threat of such damage.

Unfortunately, the Directive does not describe explicitly any methods of environmental damage evaluation, which is an additional difficulty for insurers. Generally, two methods can be used:
-   preventive (costs of prevention) for preventive measures,

- remedial (costs of replacement) for remedial measures.[5]

The preventive method amounts to operators providing all the required information about the imminent threat of environmental damage, or if there is a likelihood of such an occurrence, taking proper measures to prevent it. Moreover, in case of such an occurrence, competent authorities may instruct operators to apply particular preventive measures or take such measures themselves (Graczyk, 2005, p. 93).

Appendix II to Directive 2004/35/CE describes common framework of activities which should be conducted in order to select the most appropriate remedial method in relation to environmental damage caused to water or protected species or habitats.
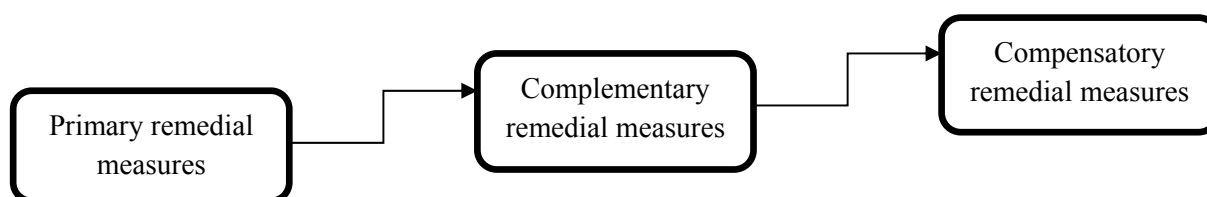
Figure 1: Remediation methods (Own study based on Appendix II to Directive 2004/35/CE)

Primary remedial measures are the ones that restore the damaged natural resources and/or impaired environmental functions to the baseline condition. If they prove insufficient, complementary remedial measures can be used. In order to compensate for interim loss which occurred after the damage and prior to restoring the natural resources/functions to the baseline condition, compensatory remedial measures are used. Interim loss can be defined as loss resulting from the fact that natural resources/functions cannot be applied to the society or other resources until primary or complementary measures have been used (Directive 2004/35/CE, 2004).

In order to eliminate problems regarding determination of environmental damage and which remedial measures should be used and in what manner, REMEDE programme (Resource Equivalency Methods for Assessing Environmental Damage in the EU) financed by European Commission was implemented by the EU. A team of lawyers, economists and ecologists participated in evaluation of 50 environmental damages and prepared Appendix II to the Directive 2004/35/CE. (Kmiecik, 2008, p. 17). The purpose of REMEDE is to draw up, test and promulgate the methods (called resource equivalency methods) of determining the type and scope of remedial measures application required to compensate for environmental damage.[6] An interesting case where these methods were used is *Vistula river crossing by the Yamal gas pipeline* (Kiejzik-Głowińska, Lipton and Tederko, 2008). The construction started in October 1998 and was completed in May 2000, which was 14 months longer than originally planned. The delay resulted in increasing the damage and raised its remedial costs.

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[5] More on this subject: Graczyk A. (2005). Określanie szkód ekologicznych powodowanych działaniem przedsiębiorstw w świetle Dyrektywy 2004/35/WE. In T. Pindór, *Proces wdrażania rozwoju zrównoważonego w przedsiębiorstwie*. Kraków: Wydawnictwo Ekonomia i Środowisko.

[6] More on this subject at: http://www.envliability.eu.

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The project involved:
- using resource equivalency analysis (REA) with regard to natural habitats in order to calculate interim losses caused by damage to the environment (crossing the river valley by a pipeline),
- presenting the methodology of damage assessment in the terrestrial and aquatic environment both in the area of direct and indirect impact of the investment,
- calculating interim losses caused by environmental damage and assessing indispensable remedial action to compensate for these losses.

The damage led to destruction of terrestrial habitats (including riparian forest (willows and poplars), riparian willow shrub and herbal shrubs, sandbar and grassland) and aquatic habitats (including the deepwater in the main stream of the river and the shallow waters in the vicinity of shoreline, islands and backwaters). In order to calculate interim losses the resource equivalency method was used separately for terrestrial and aquatic environments while applying annual discounted service loss (DSHaYs) where the total refers to the overall number of lost habitats affected by damage in the course of construction and during the period of restoring the baseline condition. The outcome of the remedial action was calculated by means of habitat "scalars" (separate for each type) which were used for normalisation of damages.

From the insurance point of view, calculating the remedial costs is of prime importance. The invoiced elements included:
- planning and design
- obtaining necessary permits
- obtaining land
- implementing the project
- nurturing activities (assumed period of 40 years)
- monitoring
- reserve (option I - 30% for replanting trees, option II - 10% for forest preservation).

The table below shows that overall cost of remedial measures regarding terrestrial habitat in option I (replanting a new forest) and aquatic habitat (improvement of river channel condition) amounted to approx. €196,000. On the other hand, option II remedial measures (preservation of the existing forest) ranged from €173,000 – €180,000. It is apparent that the cost of replanting a new forest is higher than the cost of preserving the existing one.

Table 2: Total costs of remedial measures 2008 data (Kiejzik-Głowińska et al., 2008)

Type of habitat	Terrestrial damage (riparian forest)		Aquatic damage (main river channel)
Type of remedial measures	Forest replanting	Preservation of the existing forest	Improvement of river channel condition
Cost of remedial measures	€12,000/ha	€7,150 – 9,350/ha	€31,200/ha
Total cost	€43,056	€20,375 – 27,115	€152,880

Indemnity claims trials are another important issue relating to environmental damages. In the light of Polish judicial experience, most insurance cases regarding civil liability for environmental damage end in settlement. However, there are still too few real cases to make it possible to evaluate and determine how to adjudge losses caused by environmental damage.

5   CONCLUSION

Changes in the company's legal environment which defined the new framework of corporate activities relating to the natural environment have caused a growing interest in this method of risk management among both companies operating in a manner causing danger to the environment and insurers who could provide appropriate services. Directive 2004/35/CE and the locally equivalent Act on environmental damage prevention and remedying are very strict in defining operators' civil liability for polluting the natural environment. Legal changes which have taken effect since 2007 have caused operators to find the previously available traditional civil liability insurance of business activity and property including the environmental clause to be insufficient. More and more often insurers offer now independent environmental insurance against environmental pollution. The scope of insurance protection is much broader here. What is more, the insurer does not only pay compensation for damage caused to third parties, but also covers the environmental damage and incurs the costs of removing the damage residue and restoring the habitat to the baseline condition. The described solution is mainly dedicated to large companies whose operations affect the environment to a substantial degree. Remedial costs that the policy covers are really high, and their calculation and adjustment is complex, so insurers must often turn to experts for specialist assistance. The environmental insurance market in Poland is still limited, but it is developing vigorously. Beside insurers, also financial institutions are showing a growing interest in this product. It is due to the fact that they may protect themselves against environmental damage or increased liabilities because of adverse effect of their operations on the environment. Besides, transferring the risk relating to liability for environmental damage onto the insurer is both an effective management method and a way to run a socially responsible company.

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LINKS BETWEEN GOVERNANCE AND DEVELOPMENT

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ABSTRACT
This paper aims to link public governance with economic and social development. The aim brings forth two research questions: how to assess the quality of governance and how to determine links between governance and development. Our approach combines categories of social orders with indicators available in public databases. Then we screen data on 143 countries in 2007 in order to check the usability of this approach and to find out links between governance and development. Our analyses prove that corruption perception index scores (CPI scores) explain best differences between countries in the quality of governance as well in economic and social development. Additional explanations can be searched from ease of doing business and from economic inequality. Still, there is room for differences originating from regional characteristics. Even though the paper is addressing an extensively studied area, the new approach could still promote a distinctive contribution for the current scientific debate.

Keywords: Economic development, International comparison, Public governance, Social development

1 INTRODUCTION

The paper aims to highlight possible links between the quality of governance and economic and social development. Therefore, the paper analyses: first, the quality of public governance in 143 countries in 2007[1]; second, possible links between the quality of governance and economic development; third, possible links between the quality of governance, economic development, and social development, and fourth, observed development paths. We start our search by generating a new approach for assessing the quality of governance and then use it in the following analyses.

2 QUALITY OF PUPLIC GOVERNANCE

It is not at all clear how to define the quality of public governance. It seems that many authors consider that democracy is synonym for good governance. According to the following analyses, corruption perception index score (CPI score) provides the best indicator for the quality of governance[2]. Our analyses below prove that governance has also special regional features.

2.1 Theoretical Approaches

As a concrete attempt to categorise governing regimes, the Polity IV Project has calculated authority indexes for all countries based on a scale ranging from -10, meaning a hereditary monarchy, up to +10, meaning a consolidated democracy[3]. According to the Project, the number of consolidated democracies was around 25. There are, of course, many other

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[1] All countries with at least a million inhabitants and necessary data in 2007 are included.

[2] For details of corruption perception index score see: http://www.transparency.org.

[3] Polity IV Project is led by Monty G. Marshall, for details see: www. sytemicpeace.org/polity/polity4.htm.

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approaches for assessing the quality of governance. Marshall and Cole (2008, pp. 16–17) have provided so called fragility index that describes the efficiency and legitimacy of governments. A total of 19 countries got the best value and 13 the next best. Lijphart (1999, p. 48) claimed that there were 36 countries (with population over 250,000) that had been continuously democratic since 1977. North et al. (2009) claimed that today we have, in principle, only two types of social orders: limited access orders and open access orders. The difference between these two types stays in the limits to form organisations. The first ones restrict the rights to form organisations for the national elites and the last ones leave them open to all citizens. They stated that only 25 countries had open access orders and the rest had limited access orders or had reached threshold conditions between these two. Thus, there have been differences between authors how to measure the quality of governance, and the number of the countries with the best governance system has varied between 19 and 36. Roskin (2004) turned the question upside down by claiming that in order to assess different regimes, it is best to study their results. Next we shall develop own approach for assessing the quality of governance that combines above mentioned categories of social orders with some indicators. But we shall remember also Roskin's advice.

We can divide social orders into economic and political spheres that are, of course, tightly knighted in countries with limited access orders. There are some indicators available in public databases which provide possibilities to measure the scale of access into these spheres. On the economic sphere, it seems at first sight obvious that ease of doing business describe this[4]. In order to find indicators that describe access into the political sphere, we have to consider basic characteristics of the limited access societies that are driven by the elites. When economic and political issues are there interlinked, it is obvious that traditional gift exchange is common. Thus, we can use CPI scores as proxies for the access into the political sphere. The share of national income for the richest decile could also be used for the same purpose, because it is probable that the elites take a bigger share in the limited access than in the open access societies.

However, when considering these three indicators in detail, we can notice limitations in their use. First, because good ranking in ease of doing business needs obviously a highly developed administration, it is clear that the indicator is also showing access to the political sphere – not only to the economic one. In addition to that, a more serious problem is related to the ordinal ranking provided by the database that does not reveal the amount of differences between countries achievements[5]. Second, the use of data on the share of the richest decile is limited because of inaccuracies and differences between national studies. According to Human Developed Report 2007/2008, some countries have studied income and some expenditure and the studies are from different years; from 1993 to 2005. On the other hand, CPI scores seem to be well suited for our purposes. It is interesting to notice that CPI scores correlate well with average GNI (PPP) per capita. They explain 78 per cent of variation between countries and when removing big oil exporters, 84 per cent. Therefore, we start next analysis with CPI scores and, when necessary, complete them with other indicators.

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[4] World Bank Group and International Finance Corporation provide a yearly ranking list of countries according to ease of doing business.

[5] Himanen (2013) has transformed the ordinal ranking list to a cardinal one (ease of doing business scores) but that cannot overcome the original lack of data on the amount of differences between countries.

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2.2   Quality of Governance in 143 Countries in 2007

The distribution of CPI scores (Figure 1) show a diminishing difference between countries from the biggest scores to the smallest ones. In addition, we may notice a clear drop around the score 6. In order to be able to analyse the included countries further on, we have divided them into six baskets according to their CPI scores (Table 1).
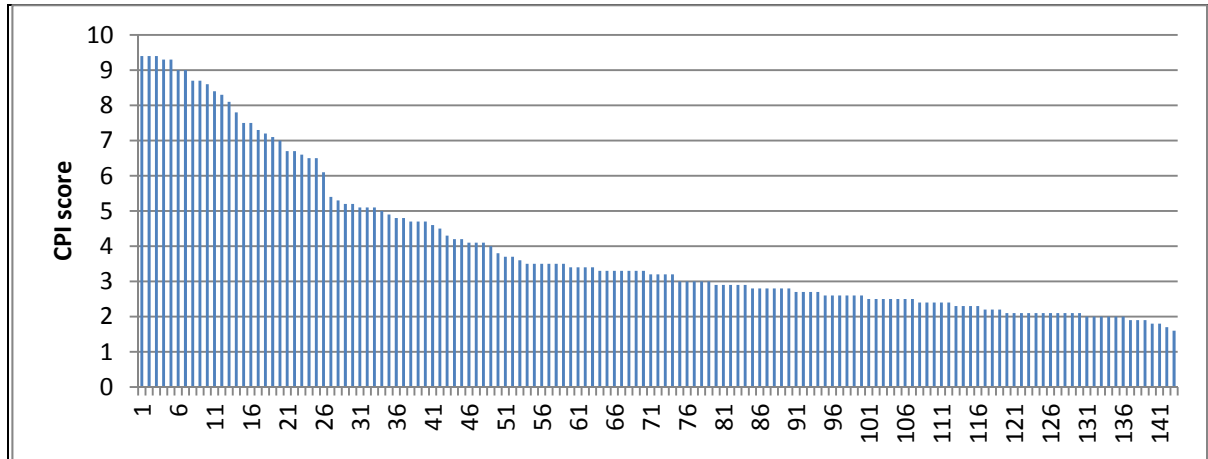
Figure 1: CPI scores in 2007 in 143 countries (Transparency International, 2007)

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Table 1: The quality of governing in 143 countries in 2007 according to CPI scores (order according to CPI scores and the countries with the same score are in the alphabetic order)

Basket					
One	**Two**	**Three**	**Four**	**Five**	**Six**
Denmark	Botswana	Colombia	Algeria	Burundi	Azerbaijan
Finland	Hungary	Ghana	Armenia	Honduras	Belarus
New Zealand	Italy	Romania	Dominican R	Iran	Congo Republic
Singapore	Czech Rep.	Senegal	Lebanon.	Libya	Côte d'Ivoire
Sweden	Korea Rep.	Brazil	Mongolia	Nepal	Ecuador
Netherlands	Malaysia	China	Albania	Phlippines	Kazakhstan
Switzerland	South Africa	India	Argentina	Yemen	Kenya
Canada	Costa Rica	Mexico	Bolivia	Cameroon	Kyrgyzstan
Norway	Slovakia	Morocco	Burkina Faso	Ethiopia	Liberia
Australia	Latvia	Peru	Egypt	Pakistan	Sierra Leone
United Kingdom	Lithuania	Georgia	Eritrea	Paraguay	Tajikistan
Hong Kong	Jordan	Saudi Arabia	Guatemala	Syria	Bangladesh
Austria	Mauritius	Serbia	Moldova	Gambia	Cambodia
Germany	Oman	Trinidad and T.	Mozambique	Indonesia	Central African R.
Ireland	Greece	Bosnia and Her.	Rwanda	Russia	Papua New Guinea
Japan	Namibia	Gabon	Uganda	Togo	Turkmenistan
France	Kuwait	Jamaica	Benin	Angola	Venezuela
United States	Poland	Lesotho	Malawi	Guinea-Bissau	Congo Dem. Rep
Belgium	Tunisia	Macedonia FYR	Mali	Nigeria	Guinea
Chile	Bulgaria	Swaziland	Ukraine		Laos.
Spain	Croatia	Thailand	Nicaragua		Chad
Uruguay	Turkey	Madagascar	Niger		Sudan
Slovenia	El Salvador	Panama	Mauritania		Uzbekistan
Estonia		Sri Lanka	Timor-LestE		Haiti
Portugal		Tanzania	Vietnam		
Israel			Zambia		

Transparency International has provided confidence intervals for CPI scores that give the range inside which a score is according to 90 per cent probability. Therefore, we can see that there existed quite clear difference between the first two baskets. However, differences between the other baskets were not that clear, e.g. Basket Three had 11 countries with the lower ends of their confidence intervals dropping down to Basket Four and correspondingly

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Basket Four had 8 countries with the upper ends of their confidence intervals reaching to Basket Three. In principle, we can state that for individual countries near the lower or upper end of their baskets (excluding the border between the first two baskets) it is not sure to which basket they actually belonged. But this uncertainty does not disturb general conclusions to be drawn below. However, it means that small differences between countries' scores are uncertain for comparison. Thus, we cannot be certain, e.g. if there were less corruption in the United Kingdom than in Hong Kong, but quite certain that there were less corruption in the United Kingdom than in France and the United States but more than in Sweden and Singapore.

There exists regularity among the baskets, so that also average ease of doing business scores and average GNI (PPP) per capita diminish from basket to basket (Table 2). Average GNI (PPP) per capita in Basket Five forms the only anomaly. This is probably due to many big oil exporters in that basket. As proved by Himanen (2013, p. 104), big oil exporters can have high affluence compared to their CPI scores.

Table 2: Average CPI and ease of doing business scores and average GNI per capita in 143 countries divided into six baskets according to their CPI scores (Himanen, 2013, p. 143)

Basket	Number of countries	Average CPI score in 2007	Average ease of doing business score in 2007 (1	Average GNI (PPP) per capita in 2007 ($)
One	26	7.9	8.9	33490
Two	23	4.7	7.2	16560
Three	25	3.4	5.6	7110
Four	26	2.8	3.7	3520
Five	19	2.4	3.3	3870
Six	24	2.0	3.3	3230
Total/average	143	4.0	5,4	11700

When comparing the above baskets with the other approaches referred above, we may notice that the number of countries in Basket One is about the same as in many other estimates of the best governed countries. When aligning our baskets with the approach of North et al. (2009), we can form three categories of states: i) Basket One includes countries with the open access social orders; ii) countries in Baskets Two and Three have reached threshold conditions for moving into open access orders; and iii) countries in the last three baskets have stayed in limited access orders. We will consider the stability of these three categories below in the connection of development paths.

3   GOVERNANCE AND ECONOMIC DEVELOPMENT

Above we noticed very strong correlation between average GNI (PPP) per capita and CPI scores in 2007. This is most interesting result when the relationship between governance and economic development is a thoroughly studied subject, but the current literature leaves a reader – to say the least – in a bewildered state. We screen next recent literature on the subject and then discuss own results for different countries and regions.

3.1 Bewildering Theories

Acemoglu and Robinson (2012, pp. 44–69) argued that the current big differences in countries' affluence cannot be explained by the earlier proposed theories. They named the following failed theories: i) the geography hypothesis, advocated in his time by philosophy Montesquieu and later on by Diamond (1997) and Sachs (2006); ii) the cultural hypothesis, starting from Max Weber's idea about the importance of the Protestant ethic, and recently advocated again by Landes (1999, p. 510); and iii) the ignorance hypothesis that citizens and governments do not know how to improve situation. Acemoglu and Robinson concentrated in explainingon why poor nations got it wrong, and their answer includes solving basic political problems and thereby establishing good institutions and governance. However, Banerjee & Duflo (2011, pp. 233–243) proved that the major figures in development economics, like Acemoglu, Robinson, Easterly, and Sachs had got it wrong. The correct answer can be found in marginal stepwise improvements (policies instead of politics) under the current (imperfect) institutions because wholesale changes in institutions are very rear and can also be counterproductive. De Soto (2001, p. 6) stated that development was restricted because possessions already existing in poor countries are not adequately documented and therefore cannot be turned into capital, but Sachs (2006, p. 321) claimed that de Soto had got it wrong. On the top of this, we can notice that Keen (2011) proved that the current mainstream concept of economics, neoclassical one, is fundamentally flawed and therefore have led macroeconomics into a totally wrong direction. In addition to the above mentioned broad approaches, we may notice exercises aimed to find statistical relationships between governance and economic development. However, according to North et al. (2009, pp. 2–3), it has remained open if there is a causal link. Actually, we noticed above very strong correlation between GNI (PPP) per capita and CPI scores, and in order to check the meaning of this correlation we screen next the exceptions.

3.2 Exceptions Confirm the Rule

When considering a country to have exceptional character if its GNI (PPP) per capita is more than 10 per cent out of the general patterns of a basket, we found 47 countries (of a total of 143) of which 21 were richer and 26 poorer than the common limits for the relevant baskets.

The reason for greater richness in 14 countries was income from oil and gas exports. Regarding the remaining seven countries without big oil or gas exports, we can notice that: i) Greece had the lowest CPI score and ease of doing business score in Western Europe and therefore it is possible that a regional impact has increased Greece's affluence into a higher level than Greece's scores suggested; ii) Italy has been relatively losing affluence that can be due to the poor quality of governance (the second lowest ease of doing business and CPI scores) when compared to other Western European countries; iii) South Korea's GNI (PPP) per capita was not very much over the upper limit of Basket Two and therefore the necessary explanation can be found in the high rank in ease of doing business; iv) Argentina has been relatively losing affluence for a long time possibly due to the poor quality of governance like Italy above; v) Lebanon's special features originate probably from the long civil war; vi) both Ukraine and Belarus had higher affluence than there CPI scores could explain and we may suspect some regional impact.

Twenty sub-Saharan countries were included in the group of 26 poorer countries. The reasons for the over-representation of sub-Saharan countries can be the colonisation period and the civil wars that made these countries so poor that it takes a long time before improved governance can increase affluence. In addition, we have to remember the impacts of malaria

and HIV/AIDS. Regarding the four countries from South America, we may claim that in these countries there still existed some restrictive features like low ease of doing business and/or high economic inequality. Behind the relative poverty of Tunisia and Jordan we can expect some regional cause added by somewhat low ease of doing business score in Jordan.

As a conclusion for the above analysis, I want to state that, in principle, good governance (assessed according to CPI scores) explains well differences between countries' GNI (PPP) per capita. The exceptions of this rule are mainly due to oil and gas exports and to some kind of regional effect. Thus we can agree with Acemoglu's and Robinson's statement above that good governance is most important but still insist that, in addition, there exists some regional impacts originating from geography, history, religion, culture or whatever. After this discussion on governance and economy, we will consider how these are related to social development.

4 SOCIAL DEVELOPMENT

The definition of social development is, of course, a complicated issue. Without going into theoretical discussions, we consider next how well countries have succeeded to empower and protect citizens. The aim is to highlight countries' achievements in 2007 explained either by national income per capita or by the quality of governance.

4.1 Empowering Citizens

Empowerment includes here three domains: education, economic equality, and average life expectation at birth. Achievements in education are next considered according to primary enrolment rates, PISA scores, and top university rates. Differences in education are quite difficult to define because no indicator is suitable for all categories of countries: primary enrolment rates are suitable for poor and middle-income countries, PISA scores for middle-income and rich countries, and top university rates for rich countries.

Primary enrolment rates followed countries' GNI (PPP) per capita ($R^2=0.44$) better than CPI scores ($R^2=0.26$). The lower correlation of the latter was mainly due to the fact that many post-Soviet countries had quite high enrolment rates despite their low CPI scores and the same was also true for some Asian countries. In principle, sub-Saharan countries had lower than average enrolment rates. That was not totally due to their low affluence, but was also a regional feature. However, we may notice that some poor African countries in baskets 3 and 4 had reached enrolment rates around 90 per cent, i.e. relatively good governing had improved education options despite of poverty. We can notice also that among the rich countries (GNI (PPP) over $15,000 in 2007) there were five countries (including both oil exporters and post-Communist countries) with somewhat low enrolment rates. These all were actually from Basket Two, and thus worse governing (compared to other rich countries in Basket One) could be a reason. An enrolment rate describes the share of children receiving the basic education. The efficiency of education has been assessed by the PISA studies. PISA scores correlated quite well with GNI (PPP) per capita ($R^2=0.74$) and almost as well with CPI scores ($R^2=0.62$). There were quite interesting regional differences, even when considering the limited number of countries included in the PISA studies. First, the Pacific was clearly the best region. Second, Eastern Europe (including also the Baltic States and Russia) had quite similar results as Western Europe. Third, some countries from South America had quite low scores. The top universities were very much concentrated into the rich countries[6]. Most of

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[6] Academic Ranking of World Universities in 2007 retrieved 20.10.2007 from www.arwu.org.

them had at least two top universities per ten million inhabitants. The exceptions that did not have any were either big oil exporters or quite small countries. The rate of top universities per ten million inhabitants correlated as well with GNI (PPP) per capita (R^2=0.82) as with CPI scores (R^2=0.81).

We will discuss economic equality with the aid of inequality ratio that is the share of national income for the richest decile divided by that for the poorest decile. Economic inequality correlates neither with GNI (PPP) per capita nor with CPI scores. However, there is a regularity that all rich countries had ratios below 20 (there was no data of the big oil exporters: Kuwait, Saudi Arabia, and Oman), and correspondingly there was only one country, Chile, with inequality ratio over 20 in Basket One. Economic inequality seems to be very much a regional phenomenon; low inequality ratios were common in Eurasia when high ratios were common in Latin America and Southern Africa.

Average life expectancy at birth correlated well with GNI (PPP) per capita (R^2=0.67) and CPI scores (R^2=0.66). The high explanation powers were due to the fact that rich countries had also high CPI scores and long life expectancy at birth when poor sub-Saharan countries had very low life expectancy at birth as well as low CPI scores. Two regional characteristics were obvious: first, very short life expectancy in sub-Saharan Africa almost disregarding of wealth or CPI scores; and second, the post-Soviet countries had clearly low life expectation at birth, even if considering differences in income.

4.2 Protecting Citizens

Here we will discuss homicides, road traffic deaths and prisoners. The rate of homicides correlated almost as well with GNI (PPP) per capita (R^2=0.35) as with CPI scores (R^2=0.29). Thus, homicide rates were usually higher in the countries with low affluence and/or low CPI score, but there were a lot of exceptions. The modest explanation power was probably due to rather strong regional impacts; especially in Latin America there were many countries with very high rates. Also, most post-Soviet countries had, compared to other Eurasian states, high rates.

Road traffic death rates correlated as well with GNI (PPP) per capita (R^2=0.50) as with CPI scores (R^2=0.49). Relatively high explanation power is due to the money needed for construction, maintenance, and control of road networks as well as to the capable administration needed for law enforcement. However, only a half of differences between countries could be explained by the above indicators, and we may suppose that the other half can be attached to some historical or regional reasons, like high road traffic death rates in Africa. In a way, CPI score analysis complement GNI (PPP) per capita analysis. For example, Greece and Kuwait had quite high road traffic death rates when compared to their affluence, but quite normal if compared to their CPI scores.

 Prisoner rates did not correlate with GNI (PPP) per capita or with CPI scores. Regional influence was a major explaining factor, so that most Western European countries had low rates, most post-Soviet countries had high rates, and the United States had the highest rate. In addition, we have to remember that low income countries (average GNI (PPP) per capita below $3000 in 2007) had low rates, probably due to their inefficient legal systems.

We may conclude that both GNI (PPP) per capita and CPI scores influence empowerment and protection of citizens. This is, of course, an expected result when these indicators are strongly

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correlated, but as we noticed above they may have also somewhat separate influences. In addition, some regional features seem to have big independent impacts.

5   DEVELOPMENT PATHS

Historical evidence proves that most countries – but not all – have got richer during the last decades, even though there has been big differences in economic growth rates. During 1970-2007, only 20 countries (of the included 143 countries) had average annual real growth rate per capita of at least three per cent that means that their citizens' average GNI (PPP) per capita increased three times during these years.[7] About a half of these countries were from Asia and the rest were spread around the world. During more recent years 1996-2007, there were 20 countries with economic growth rates of at least 4.5 per cent that means some 70 per cent increase in their citizens' affluence during these years. A half of these were post-Communist countries and almost a half of the rest were again Asian countries. Thus behind these high growth rates, we can see both regional causes – whatever they are – and wholesale regime changes. As a recent great example of wholesale regime changes, we discuss next post-Communist countries and after them try to assess the direction of changes in the quality of governance.

5.1   Post-Communist Countries

As a starting point, we have to remember that the Communist regimes were extremely restrictive regarding access to political and economic spheres. Both were reserved mainly for the members of the ruling Communist party that formed therefore the national elites. Because these elites were better educated and had better networks and financing opportunities than other citizens, they could exploit the opportunities that the change of the regime provided. This meant for them options to capture political and economic power also after the regime change. Therefore, based on the original changes around 1990 and later development, quite different regimes have emerged. As a rough structure for the situation in 2007, we can divide the post-Communist states[8] into three major blocks according to the liberalisation of access to political and economic spheres (Table 1): i) liberal access countries included Slovenia and Estonia; ii) threshold countries included most Eastern European countries and Lithuania, Latvia, Georgia, and China; iii) limited access countries: included Albania, most post-Soviet countries added by Mongolia, Vietnam, Laos and Cambodia. Although the national Communist parties have kept power in China, Vietnam, and Laos, these countries have liberated access to the economic sphere. In principle, it is clear that European post-Communist countries had better public governance than Asian ones. However, we have to notice that China was included in the threshold countries.

5.2   Progress or Regress?

We concluded above that CPI scores formed the best indicators for assessing the quality of governance. With the aid of these scores, we divided the included countries into three categories according to their development stages. We try next to assess possible general tendencies in development by analysing countries movements between these three categories from 2007 to 2011. We will consider that a change has happened if the CPI scores differ from

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[7]   The   ERS   International   Macroeconomic   Data   Set   retrieved   20.12.2007   from www.ers.usda.gov/Data/Macroeconomics.

[8] I have divided Europe into three parts: Western Europe includes countries that stayed out of communism; Eastern European countries got communism after WW II; and the post-Soviet countries were annexed into the Soviet Union.

each other at least by 0.4 that correspondence with the common confidence range in 2007.[9] The average CPI score for all 143 countries was 3.9 both in 2007 and 2011. However, there were 44 countries that had a significant (at least 0.4) change in their CPI scores from 2007 to 2011, of which 27 scores were reduced and 17 improved.

In Basket One, CPI scores were increased in two and decreased in four countries. However, all countries could still be included in Basket One. Among the threshold countries, CPI scores were improved in five and decreased in fifteen countries. Botswana had the highest CPI score in 2007 in Basket Two and had still improved position so that Botswana could be upgraded into Basket One in 2011as a first country from Africa. On the other hand, Senegal and Mexico from Basket Three had so low CPI scores in 2011 that they could be moved to Basket Four, i.e. out of the threshold category. Instead of them, Rwanda, Zambia, and the Gambia, could be moved from the limited access order countries to the threshold category in 2011.

As noticed above, the average CPI score for all countries had not changed from 2007 to 2011, even though, there were more countries with decreased than increased scores. In principle, the above defined three categories were quite stable. The countries with changes in CPI scores were spread all over the world. A minor tendency that the development was most positive in sub-Saharan countries and most negative in European countries is, of course, quite uncertain due to the small number of changes per region. When interpreting these results, we may remember that the financial crisis that started in 2008 was still on going in 2011. The crisis was worst in Europe that could explain reductions in CPI scores in many European countries when a positive economic growth in many sub-Saharan countries could explain a more positive development there. These speculations would provide some support for the connection between economic growth and the quality of governance.

6   CONCLUSION

Our new approach for assessing the quality of governance by CPI scores divides the world into three distinct categories: 26 countries with open access social orders; 48 countries with threshold conditions; and 69 countries with limited access social orders. In principle, there is no certainty that states are improving their governance; we could notice both progress and regress. CPI scores explain well differences in countries' affluence, and exceptions are mainly caused by oil and gas exports added by some regional effects.

Many phenomena related to empowering and protecting citizens could be explained either by affluence or by the quality of governing. However, on top of that, we could notice the impact of regional features. Thus short average life expectancy at birth was a sub-Saharan feature and in a milder form also found in post-Soviet countries. Economic equality was best in Eurasia and worst in Latin America. High rates of homicides were common in Latin America and relatively high also in post-Soviet countries. Road traffic death rates were high in Africa. The highest rate of prisoners was in the United States and also quite high rates were common in most post-Soviet countries.

The use of CPI scores for assessing the quality of governance can be complemented by two other indicators that aid to explain many differing characteristics: ease of doing business and economic inequality. It is possible that CPI scores highlight, in addition to corruption and access to the political sphere, also the general business climate in the country and by that way

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[9] CPI scores for 2011are from Transparency International's Annual Report 2011 retrieved 10.12.2012 from www.transparency.org.

reflect access also to the economic sphere. In principle, this paper has opened a simple approach, by using CPI scores as proxies for the quality of governance, to analyse many interlinking phenomena of our complex world.

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RECRUITMENT OF EMPLOYEES AND LABOUR MARKET IN CROATIA

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ABSTRACT
Searching for job, a new and better workplace, nowadays is challenging and tiresome. Labour market opportunities don't offer much choice and due to the financial crisis hundreds of people stay unemployed. Recruitment of employees has become the critical part in modern society development and human resource management. This has been recognized by the theory and extensive literature reviews regarding employment have already been published. The purpose of this paper is to provide a selective literature review that presents the current status of research on various recruitment topics and to stimulate future research on several recruitment issues. Through this paper the recruitment issues and labour market in Croatia will be analyzed and the purpose is to present the employment rates and developments of labour market in selected Croatian counties. The analysis will be made using secondary data available online regarding the number of current and past job seekers and job openings.

Keywords: Croatia, Employee recruitment, Employment process, Labour market, IT

1 INTRODUCTION

In this rapidly growing knowledge economy, companies are in need of competitive advantage of more efficient exploitation of human resources and intellectual capital. Human resources (HR) are the key components in every organization representing total knowledge, talent, attitude, creative ability, aptitude and belief of an individual involved in the affairs of an organization (Dhamija, 2012). To achieve its strategic objectives, a fundamental concern for an organization is that its HR strategy is directed towards having the right people with the right skills, knowledge and attributes in the right positions. The amount to which the demand for labour, in numbers and in the availability of various skills, expertise and knowledge, can be met by the available supply is a key driver on the range of choices that an organization has when determining an appropriate HR strategy (Wilton, 2010). Labour market context shapes the approach which company takes towards human resources management and is one of the key factors in determining an organization's '*degrees of freedom*' in human resources strategic formation (Boxall and Purcell, 2003).

Job search is process that aims to match job seekers to suitable job opportunities (Hasluck and Green, 2007). From a company's perspective, recruitment of efficient staff is one of the important activities as it generates the human capital (Dhamija, 2012). Recruitment includes ″*practices and activities carried out by the company with the aim of identifying and attracting*

potential employees" (Breaugh, 2000). Having various options when defining their recruitment process, companies can choose between traditional and e-recruitment methods. Today, companies mostly go for the online recruitment method, as traditional job advertising method has a higher cost expectation. The use of online recruitment has grown over the past years and the Internet is now widely adopted medium for recruiters and job seekers (Parry and Tyson, 2008).

Changing environment of the labour market, especially in developing countries, implies a change in the supply and demand for the workers. Turbulent environment creates gaps between the knowledge and skills of unemployed and the knowledge and skills that employers (companies) are looking for, thus becoming one of the biggest problems and challenges for each policy maker. This is a reason why link between labour market and recruitment process is becoming more and more interesting for researchers. There are a lot of reasons for the gap between demand and supply side and it is important to stress that education and training have to become crucial part in prevention of unemployment. Trend indicates that the better process of education and training of workers results with lower unemployment; workers becoming more flexible and more comfortable in the workplace (Kacun, 2002).

1.1   Research question and research methodology

The research problem is investigating the relationship between structural unemployment and the largest companies in selected Croatian counties. Structural unemployment is more typical for developing countries where economy is not efficient for hiring all available workforce. Also, the purpose of this paper was to address issues of employee recruitment and current labour market situation in selected Croatian counties. Through this paper authors present the evidence of recruitment and labour market in Croatia using secondary data available online.

This paper presents a qualitative and quantitative analysis of labour market and recruitment process based on data collected primarily from the *Annual statistical report by Croatian Employment Service* (HZZ, 2013) and from the report on the ranking of *500 largest Croatian companies* posted by Poslovna.hr and business publication Lider. Base for the empirical data analysis was also review of some recent literature made by researchers. This paper poses a research question: *Is there relationship between structural unemployment and dominant industry in selected counties?* Before the presentation of the results of the analysis, it must be noted that the main object of analysis in this research paper are large companies from different industrial sectors in Croatia. The research sample was made of 200 companies with the top composite scores based on their rankings for market value, sales, profits and assets. Companies show a very high range in the number of employees from 5 to more than 11,000.

In the article, the authors first present the results of a literature review about HRM, recruitment process and labour market. After that, the authors present the research results that were collected through secondary data analysis.

2   OVERVIEW OF PUBLISHED PAPERS – HRM, RECRUITMENT PROCESS AND LABOUR MARKET

Human resource management (HRM) thinking and practice have evolved in new directions during the first decade of the twenty-first century. The concept of human resource management has a built-in management and human resource development issue in the context of strategic management on the one hand and refluxes to the whole strategic concept and long

neglected human dimension on the other hand (Bahtijarević Šiber, 1999). Research on HRM began in the 1980. One of the first studies of HRM was *The Warwick study* in the late 1980s. This was the research program which included 15 organization and 350 in-depth interviews. All respondents were ranged from senior executives to shop-floor employees, but still the most attention was focused on key line managers. Ten years later *The Loughborough study* showed that HRM is resilient phenomenon. This study was made on Britain's major companies (Storey, 1995). Fombrun et al. (1984) summed up "generic" HRM functions which are performed via different HRM practices in organization. These generic functions include HRM policies (developing policies relating to personnel management of the firm); employment (defining recruitment and selection procedures for staffing needs); development (strategies for training and development of employees); performance (performance appraisal programs); compensation (designing reward systems for the employees).

Focus of this paper is the HR recruitment function. Due to decrease of possibility that the human resources can be imitated recruitment function distinguishes the company and differentiates the company's employees from those of its competitors (Wright and McMahan, 1992). Recruitment activities are executed by organizations for following purposes (Barber, 1998): (1) to define the target population for satisfying organization's personnel needs; (2) to select labour market segments and geographic regions for conducting recruitment campaigns; (3) to choose the medium for reaching the target population; (4) to deliver messages for disseminating information through the selected medium; (5) to prepare final offers for acquiring qualified applicants; and (6) to create general policies and actions for managing the overall recruitment function.

Interest in the topic of employee recruitment has increased over the last years. In the first edition of the Handbook of Industrial and Organizational Psychology in 1976, less than one page of coverage was filled with the topic of employee recruitment (Breaugh, 2000). Nowadays articles are filled with theory and practices of the of employee recruitment issues. The internet has proved to be immensely powerful tool for different kind of services like HR planning, HR evaluation, HR rewards and HR recruitment. The role in the employee search through use of the information technology will be discussed later.

Vital values for organisation are the experiences, skills, innovativeness and insights of its people. Human resources are the key components in every organization and they represent the total knowledge, talent, and attitude of an organization. Wright and McMahan (1992), drawing on previous research from Barney's (1991) and his resource-based theory of the firm, argue that human resources may be used as a source of sustained competitive advantage when main requirements are met. Firstly the HR must add value to the company's production processes; secondly the skills that company inquires have to be extraordinary and also cannot be easily imitated. Wright and McMahan (1992) stated that companies' human resources are the key resources, and cannot be replaced with technological advances and other substitutes if they provide the core source of sustainable competitive advantage. Recruitment includes practices and activities carried out by the organization with the aim of identifying and attracting potential employees (Breaugh and Starke, 2000). Labour market is the mechanism through which human labour is bought and sold as a commodity. It constitutes the systematic relationship that exists between workers and their working organizations, it presents the means by which labour demand (the number and type of available jobs) is matched with labour supply (the number and type of available workers) (Wilton, 2010). As mentioned earlier the development of HRM in companies has increased in the last years. Global labour

markets are constantly in the process of changing. Data and analysis of unemployed people who are actively trying to find any type of job are directly connected with the processes in the labour market and HRM and recruitment strategy of companies.

There are a several types of unemployment (Samuelson and Nordhaus, 2011): (1) Structural unemployment, (2) Frictional Unemployment, (3) Cyclical Unemployment. For the purpose of this research, we will look into structural unemployment which is a result of mismatch between available jobs and demand for workforce. To prevent gap between demand and supply, labour market as well as the organisations have to be more flexible and constantly work on restructuring their processes, strategies and structures. Flexibility also means that employers who are on demand side have to *"increase their efforts to find suitable staff"* using different recruitment methods which leads to different recruitment strategies (Henkens, Remery and Schippers, 2005). In his working paper The Labor Market Effects of Employer Recruitment Choice, DeVaro (2007, p. 4) concludes that *"employers and job seekers are brought together for potential matches through their recruitment and job search activities"*.
Analysing labour market in Germany, Wieczorek (2005) found out that many jobs have been lost owing to structural change and globalisation. Growing industries like information and communication technologies, media, medical engineering, etc., generate a demand for workers with specific qualifications that are currently not on the supply side. In the book 'Labour Market and Skills in the Western Balkans' Arandarenko and Bartlett (2012, p. 5) remark that *"the economic transition in the Western Balkans has involved large-scale structural change which has come about through the processes of privatisation and enterprise restructuring"*.

The same situation is also present in Croatia, which is a transition economy, where turbulence in the labour markets has been even greater because of the structural changes in all segments of the economy and in all industries. Those changes have become even more dominant during the current global economic crisis. Unfortunately, in his working paper Scarpetta (1998) concludes that one of the key features of the European labour market is the rise in long-term unemployment and discouragement among the job-seekers. During the years this situation has not been becoming better.

3   USAGE OF IT IN RECRUITMENT PROCESS

Organizations are facing a day-to-day challenge of strong competition for skilled employees while on the other side they have to cope with decrease in physical, manpower and financial resources for recruitment process. (Dileep and Srota, 2012). One of the answers to this problem is becoming recognized in omnipresence and increased availability of ICT, which enabled new worldwide trends for HR functions - online recruitment also known as e-recruitment (Bussler and Davis, 2001). E-recruitment has evolved into a sophisticated interactive engine that automates and virtualizes all the aspects of the hiring process (Dysart, 2006) and has grown rapidly over the past ten years. As Cober and Brown (2006) noted, it is now widely used by both recruiters and job seekers across the world. Usage of IT and the internet can facilitate selection of employees (Galanaki, 2002). The Society for Human Resource Management (2008) has published report on workplace trends during the period 2007–2008 which indicates following:

- A higher demand for skilled workers, e-recruiting tools and the mobility of the workforce in today's economy.
- Organizations have found themselves in high competition for a shrinking supply of workers.

- Due to greater prevalence of HR outsourcing and increased use of HR technology the HR professionals are demanding increased customization of products and services from outsourcing partners.
- An increase in Business Process Outsourcing (BPO) including recruiting and great increase of technology used in the practice of recruitment.

Sing in 2006 indicated that recruitment is one area where all the big and contemporary companies who follow last achievements leverage IT (Dileep and Srota, 2012). One of the mostly widespread models of e-recruitment is through company's own websites which is more popular among larger companies and the other is hosting own requirements on other websites. That is also why there are ever more specialized websites where job seekers can post their resumes, and companies post their vacancies. To distinguish employees with low-quality bio-data's from the ones that the company needs the pre-employment testing was introduced. These tools test online the employment assessments and filter the applicants.Various IT applications have been developed in order to help the company and the job seeker in fulfilling their goals. Applicant Tracking Systems (ATS) i.e. web-based ATS which makes it easier for organisation to keep track of their job applications and helps them hire the right people. The system is easy-to-use, cost effective and tracks applicants' status as they move through workflow, and allows users to retrieve all applicants at a certain stage, thus giving them control over all applicants at all times (Gara, 2001). Integrating Human Resource service delivery models and operating HR systems through technology the HR are adding value to the company through saving time and money for more strategic HR activities (Dileep and Srota, 2012).

Person's decision to apply for a specific job opening could be affected by self-examining if their characteristics fit the observed organizational characteristics (Cable and Judge, 1994). So, as we are aware that companies obtain information about their prospective employees, job seekers as well use all the available information from recruitment messages as the foundation for developing fit perception with hiring organizations. Previous research of online available recruitment information has shown that among 200 the best Croatian companies only 63.5% have a webpage regarding employment. Also only 26% of them offer an online application. Important thing for companies in order to ensure positive communication with potential employees is the availability of their webpage in other languages though only 70% of Croatian top companies offer a page in English (Klačmer Čalopa and Horvat, 2012).

4 EVIDENCE FROM CROATIA
A job vacancy is a *paid post that is newly created, unoccupied, or about to become vacant*: a) for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned, and b) which the employer intends to fill either immediately or within a specific period of time (EVC, 2012). For the individuals the employability depends on the knowledge, skills and attitudes they possess, the way they use those assets and present them to employers and the context (e.g. personal circumstances and labour market environment) within which they seek for work. Market is consistent of job seeker and job vacancies. Though, can the supply of job seekers be enough for the demand of job vacancies?

For this paper unemployment and job vacancies in top 200 companies in Croatian counties were analysed. Secondary data available in annual statistical report, journals and online was used. As the source of information, the data available on Croatian Employment services

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website regarding the unemployment and job vacancies was used. Using '*The Best 500 Companies'* listing the first 200 companies, based on the new added value was included in the analysis. This listing is formed in association of Financial Agency of Croatia, Institute for Business Intelligence and journal 'Lider' (2012). Companies are ranked according to the new added value, which is a sum of profit before tax and expenditures for salaries. The authors of this article analyzed the first 200 companies with regard to their location in Croatian counties. The results are presented below.

By comparing the ratio over different years the figures indicate how labour market tightness is developing over time (see figure 1). The indicator should be interpreted with care because the ratio of unemployed to the stock of job vacancies tends to be overestimated. The job vacancies in agriculture and the public sector are excluded to get cross-country comparable data and generally not all available job opportunities are measured by job vacancy statistics because not all job opportunities are announced as job vacancies (European Vacancy Monitor, 2012). The Chart 1 shows the ratio between number of unemployed people and the stock of job vacancies for the year 2012 in every county.
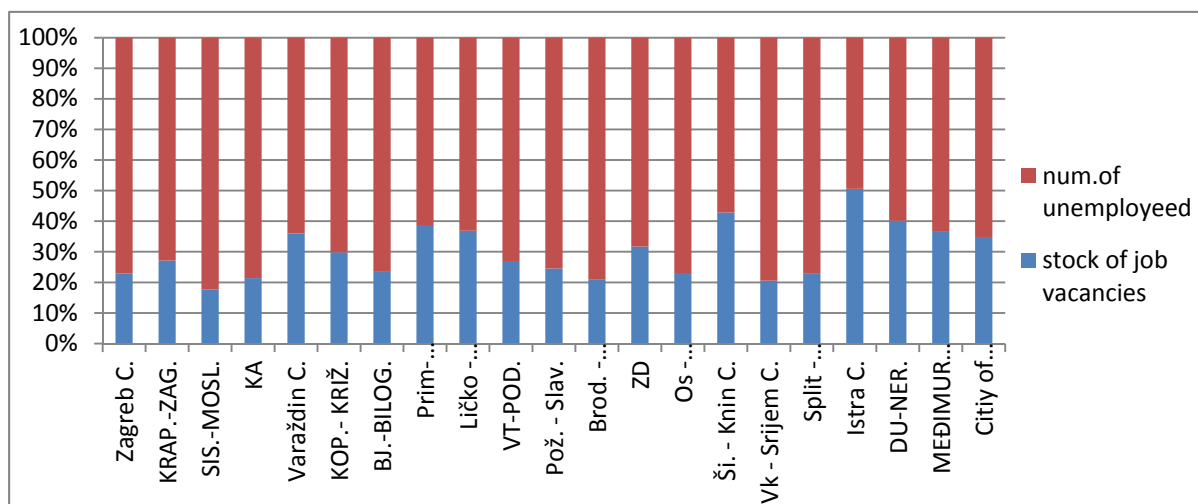
Chart 1: The rate between unemployment and job vacancies for Croatian counties for the year 2012 (authors work; Croatian Employment services, HZZ)

The Chart 2 (below) shows the ratio between number of unemployed people and the stock of job vacancies for the period of 9 years (2004-2012) for Croatia. The analysis was made using data from 'Croatian Employment services' regarding unemployment for a period of time.

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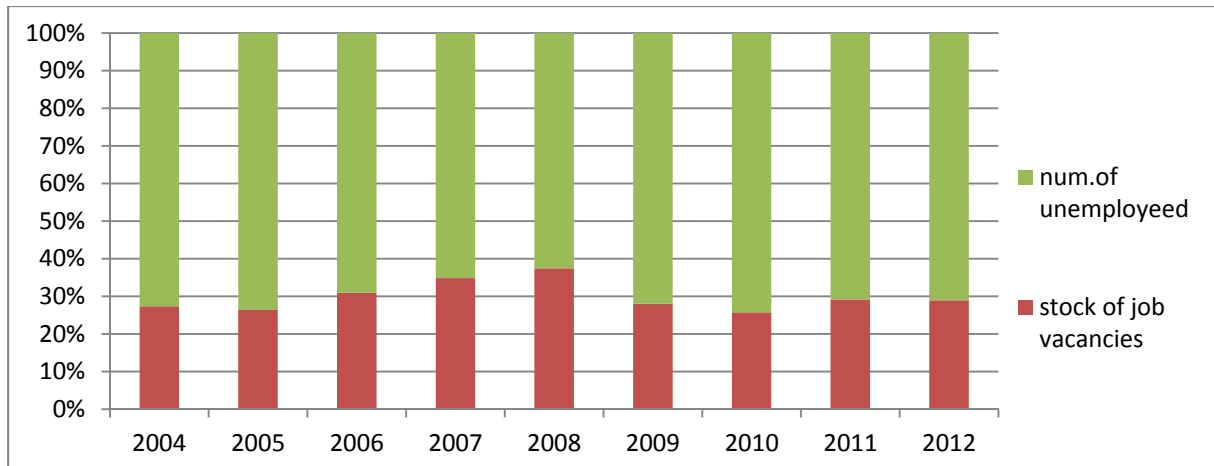
Chart 2: The ratio between unemployment and job vacancies for Croatia for the period 2004 – 2012 (authors work, data source: Croatian Employment services, HZZ)

It is obvious that number of unemployed has been almost three times higher than the number of free work places. This implies high unemployment rate in Croatia. But how does the number of job vacancies from the perspective of the companies look like? To analyse the demand for workers, authors used the Top 200 companies in Croatia regarding the new value added. The authors have analysed the territorial dispersion of the top 200 companies. The data on 200 top Croatian companies show their dispersion across Croatia, which is as follows:

Table 1: Territorial dispersion of 200 Croatian biggest companies 2012 (Lider, 2012; authors work)

County	%	County	%	County	%
Zagreb	6,5	Virovitica-Podravina	2	Vukovar-Syrmia	1
Karlovac	1	Požega-Slavonia	1,5	Split-Dalmatia	8
Varaždin	3	Brod-Posavina	1	Istria	2
Koprivnica-Križevci	5	Zadar	0,5	Dubrovnik-Neretva	0,5
Bjelovar-Bilogora	0,5	Osijek-Baranja	2,5	Međimurje	1,5
Primorje-Gorski Kotar	9	Šibenik-Knin	1	City of Zagreb	53,5

The most of the 200 biggest Croatian companies (53.4%) are located in capital of Croatia – City of Zagreb, followed by Primorje-Gorski kotar county (9%), Split-Dalmatia county (8%) and Zagreb county (7%). For further analysis of structural unemployment these 3 counties and City of Zagreb was analyzed in detail.

County	%
Zagreb	7
Primorje-Gorski Kotar	9
Split-Dalmatia	8
City of Zagreb	53.4

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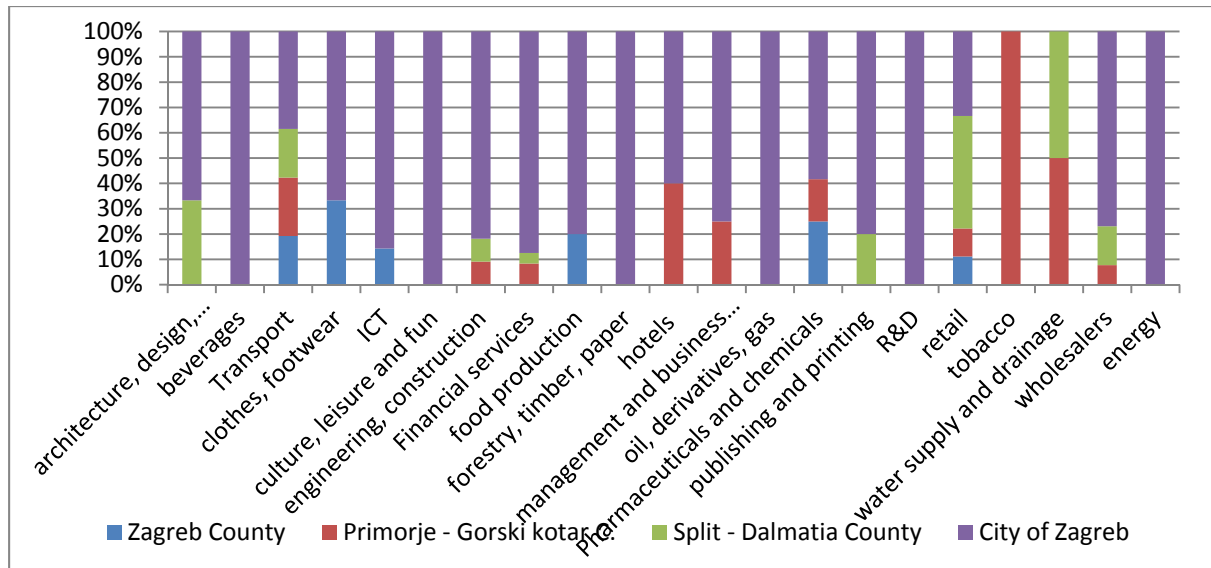
Chart 3: The analysis of 3 counties and city of Zagreb and the share of companies by industry for the year 2011

Chart 3 shows the overview of the companies form top 200 by industry presented through the 3 county and the City of Zagreb. For the comparison the number of job seekers in these selected counties and City of Zagreb by the industry of their previous work is presented in the chart 4.
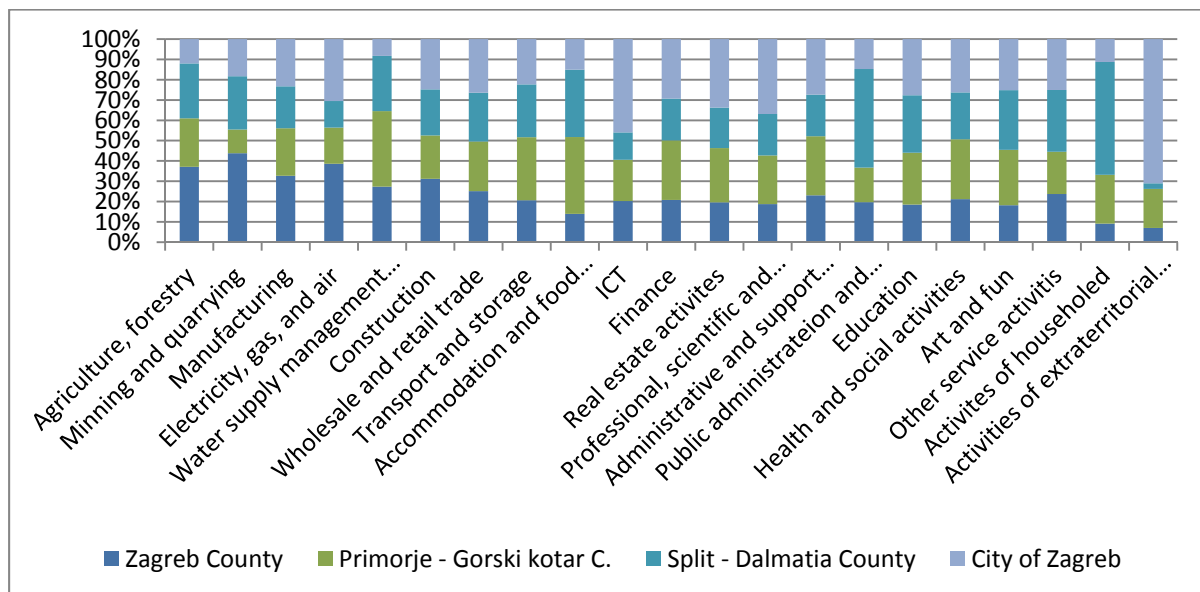
Chart 4: The analysis of 3 counties and city of Zagreb and the share of job seekers by industry of their previous work for the year 2011

The analysis of both figures shows discrepancies in the demand of employees and the supply i.e. the profile of job seekers. This confirms what was mentioned in many analyses before, that there is a high structural unemployment due to the imbalance between demand and supply side. In her research paper Obadić (2008) remarks that Croatian labour market shows structural problems like inflexibility, mismatch between supply and demand based on

profession and education. The literature recognises various causes of structural unemployment, i.e. by technological advances, trade agreements, industries that are declining and other (Amadeo, 2012). Our analysis shows that for example in City of Zagreb there are a large number of job seekers in the ICT sector, as well a large number of companies in this sector. Though, a high demand for employees in administration and management, due to the number of companies in this sector, is not met by the number of unemployed in this sector. Analysing the Primorje-Gorski Kotar County it can be noticed that there is a significant number of unemployed in the accommodation and food industry and transportation. From the top 200 countries which are situated in Primorje-Gorski Kotar County the most are in hotels industry and tobacco, which show an discrepancies between job seekers and job vacancy. The same situation is in other two counties.

5   CONCLUSION AND IMPLICATIONS FOR FUTURE WORK

The research was conducted to understand the connection between labour market (structural unemployment) on one side, and the position and recruitment process of the largest companies in selected counties on the other side. We wanted to present the fact that in the counties with large companies, structural unemployment is even more evident. Usually, big companies have a lot of power because of the industries they're involved in. And certain type of industries is looking for certain type of people with specific skills and knowledge. That indicates the discrepancy between supply and demand for workers in their professions, qualifications or regional distribution.

Also, in the article we made short presentation about effect of technology, market and development of HR on the recruitment process. The literature review showed that implementing IT into human resources management improves and has positive effects on the recruitment process. As the evidence from Croatia show, companies aren't aware of the advantages that either e-business or e-recruitment has to offer.

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ABSTRACT
Knowledge management is considered to be one of the most important innovative methods to increase the profitability of the company as actually it is a question of aspiration to use knowledge of her employees for the more successful performance. Knowledge management efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. This document introduces the principal features of the phenomena, proves the value of information holders and also relates directly to the effectiveness with which the managed knowledge enables the members of the organization to deal with today's situations and envision and create their future.

Keywords: *Data Mining, Explicit, Implicit And Tacit Knowledge, Self-Training Organization, Worker Of Knowledge*

"Cogito ergo sum"
René Descartes

1 INTRODUCTION

Knowledge management (KM) comprises a range of strategies and practices used in an organization to identify, create, represent, distribute, and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organizations as processes or practices.

Origin preconditions of this term and thus the whole managerial concept had place even in the middle of the XX century. At this particular time the main ideas of the post-industrial society and new type of workers — "workers of knowledge" were created. The theory of the new society had the development in E.Toffler's works where he specified 1956 as symbolical start date of a new civilization. Knowledge and information were announced as the main values. In the 1970th, the information bases of knowledge management were developing in works V.M. Glushkov, R.F.Gilyarevsky, L. S. Kozachkov. At the end of the 1980th Sweden, USA, Japan developed three different approaches to the concept the "knowledge managements" which have received further corresponding names: Scandinavian, or European, American and Japanese.

In 1990 in the book "The fifth discipline: Art and the practician of the self-training organization" Peter Senge represents the learning organization concept — the company capable to continuous self-training.

An established discipline since 1991, KM includes courses taught in the fields of business administration, information systems, management, and library and information sciences. More recently, other fields have started contributing to KM research; these include information and media, computer science, public health, and public policy.

Many large companies and non-profit organizations have resources dedicated to internal KM efforts, often as a part of their business strategy, information technology, or human resource management departments. Several consulting companies also exist that provide strategy and advice regarding KM to these organizations.

2   KM BASIS

Knowledge management efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. KM efforts overlap with organizational learning, and may be distinguished from that by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the sharing of knowledge. It is seen as an enabler of organizational learning and a more concrete mechanism than the previous abstract research.

2.1   Approaches to a knowledge term

A broad range of thoughts on the KM discipline exist; approaches vary by author and school. As the discipline matures, academic debates have increased regarding both the theory and practice of KM, to include the following perspectives:

- Techno-centric with a focus on technology, ideally those that enhance knowledge sharing and creation.
- Organizational with a focus on how an organization can be designed to facilitate knowledge processes best.
- Ecological with a focus on the interaction of people, identity, knowledge, and environmental factors as a complex adaptive system akin to a natural ecosystem.

In the KM literature, knowledge is most commonly categorized as either explicit or tacit (that which is in people's heads). This characterization is however rather too simple, but a more important point, and a criticism, is that it is misleading. A much more nuanced and useful characterization is to describe knowledge as explicit, implicit, and tacit.

1. Explicit: information or knowledge that is set out in tangible form.
2. Implicit: information or knowledge that is not set out in tangible form but could be made explicit.
3. Tacit: information or knowledge that one would have extreme difficulty operationally setting out in tangible form.

The classic example in the KM literature of true "tacit" knowledge is Nonaka and Takeuchi's example of the kinesthetic knowledge that was necessary to design and engineer a home bread maker, knowledge that could only be gained or transferred by having engineers work alongside bread makers and learn the motions and the "feel" necessary to knead bread dough.

The operational origin of KM, as the term is understood today, arose within the consulting community and from there the principles of KM were rather rapidly spread by the consulting organizations to other disciplines. The consulting firms quickly realized the potential of the Intranet flavor of the Internet for linking together their own geographically dispersed and knowledge-based organizations. Once having gained expertise in how to take advantage of intranets to connect across their organizations and to share and manage information and knowledge, they then understood that the expertise they had gained was a product that could be sold to other organizations. A new product of course needed a name, and the name chosen, or at least arrived at, was Knowledge Management. The timing was propitious, as the

enthusiasm for intellectual capital in the 1980s, had primed the pump for the recognition of information and knowledge as essential assets for any organization.

Perhaps the most central thrust in KM is to capture and make available, so it can be used by others in the organization, the information and knowledge that is in people's heads as it were, and that has never been explicitly set down.

What is still probably the best graphic to try to set forth what KM is constituted of, is the graphic developed by IBM for the use of their KM consultants, based on the distinction between collecting stuff (content) and connecting people, presented here with minor modifications:

Table 1: IBM graphic of KM

	COLLECTING (STUFF) & CODIFICATION	CONNECTING (PEOPLE) & PERSONALIZATION
DIRECTED INFORMATION & KNOWLEDGE SEARCH EXPLOIT	Databases, external & internal Content Architecture Information Service Support (training required) data mining best practices / lessons learned/after action analysis (HARVEST)	community & learning directories, "yellow pages" (expertise locators) findings & facilitating tools, groupware response teams (HARNESS)
SERENDIPITY & BROWSING EXPLORE	Cultural support current awareness profiles and databases selection of items for alerting purposes / push data mining best practices (HUNTING)	Cultural support spaces - libraries & lounges (literal & virtual), cultural support, groupware travel & meeting attendance (HYPOTHESIZE)

2.2   The mission of knowledge management

The reason of appearance of the concept of Knowledge Management is the information processing problem in large corporations. It became clear that the main weakness is keeping isolated the knowledge accumulated by specialists of the company. The knowledge which isn't used and doesn't increase, and, finally, becomes old and useless, exactly like the money which are stored without turning into a working capital, finally, depreciate. The significant contribution to development of this area of management was made by the well-known economist Peter Druker. He introduced the term "worker of knowledge" into circulation (the person who has the higher education, capabilities to purchase and apply theoretical and analytical knowledge, has absolutely other, new approach to work and other mentality; this is the person who always keeps the labor instruments just in case. Peter Druker determined knowledge as the main resource distinguishing business and giving to it decisive competitive advantages.

Knowledge management has two main missions. The first is increase of efficiency, use of knowledge for a growth of productivity by increase in speed or cost reduction. The second is promotion of innovations, creation of new products and services, new entities and business

processes. The first task received the name "make as it is necessary" or "knowledge for application", and the second — "think up itself" or "knowledge for research".

Different frameworks for distinguishing between different 'types of' knowledge exist. One proposed framework for categorizing the dimensions of knowledge distinguishes between tacit knowledge and explicit knowledge. Tacit knowledge represents internalized knowledge that an individual may not be consciously aware of, such as how he or she accomplishes particular tasks. At the opposite end of the spectrum, explicit knowledge represents knowledge that the individual holds consciously in mental focus, in a form that can easily be communicated to others.

Early research suggested that a successful KM effort needs to convert internalized tacit knowledge into explicit knowledge in order to share it, but the same effort must also permit individuals to internalize and make personally meaningful any codified knowledge retrieved from the KM effort. Subsequent research into KM suggested that a distinction between tacit knowledge and explicit knowledge represented an oversimplification and that the notion of explicit knowledge is self-contradictory. Specifically, for knowledge to be made explicit, it must be translated into information. Later on, Ikujiro Nonaka proposed a model (Socialization, Externalization, Combination, Internalization) which considers a spiraling knowledge process interaction between explicit knowledge and tacit knowledge.
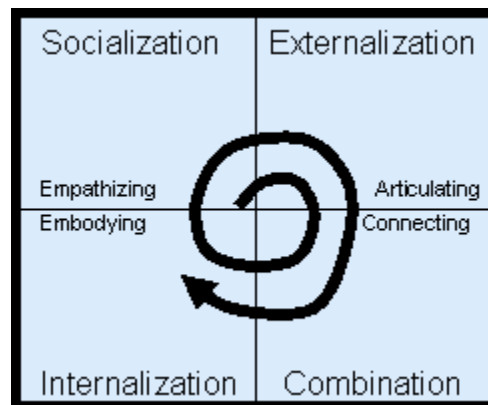
Figure 1: The SECI model (Nonaka and Takeuchi, 1995)

In this model, knowledge follows a cycle in which implicit knowledge is 'extracted' to become explicit knowledge, and explicit knowledge is 're-internalized' into implicit knowledge.

3   CHAPTER. STAGES OF KM
Looking at KM historically through the stages of its development tells us not only about the history of KM, but it also reveals a great deal about what constitutes KM.

3.1   Information technology
The initial stage (the firststage) of KM was driven primarily by IT, information technology. That first stage has been described using an equestrian metaphor as "by the internet out of intellectual capital". The concept of intellectual capital provided the justification and the framework, the seed, and the availability of the internet provided the tool. As described above, the consulting community jumped at the new capabilities provided by the Internet, using it first for themselves, realizing that if they shared knowledge across their organization

more effectively, then they could avoid reinventing the wheel, underbid their competitors, and make more profit. The first use of the term Knowledge Management in the new context appears to have been at McKinsey. They realized quickly that they had a compelling new product. Ernst and Young organized the first conference on KM in 1992 in Boston. The salient point is that the first stage of KM was about how to deploy that new technology to accomplish more effective use of information and knowledge.

The first stage might be described as the "If only Texas Instruments knew what Texas Instruments knew" stage, to revisit a much quoted aphorism. The hallmark phrase of Stage 1 was first "best practices," to be replaced by the more politic "lessons learned."

3.2   HR and corporate culture

The second stage of KM emerged when it became apparent that simply deploying new technology was not sufficient to effectively enable information and knowledge sharing. Human and cultural dimensions needed to be addressed. The second stage might be described as the " 'If you build it they will come' is a fallacy" stage—the recognition that "If you build it they will come" is a recipe that can easily lead to quick and embarrassing failure if human factors are not sufficiently taken into account.

It became clear that KM implementation would involve changes in the corporate culture, in many cases rather significant changes. Consider the case above of the new pediatric medicine and the discovery of the efficacy of adding orange juice to the recipe. Pharmaceutical sales reps are compensated primarily not by salary, but by bonuses based on sales results. What is in it for that sales rep to share her new discovery when the most likely result is that next year her bonus would be substantially reduced? The changes in corporate culture needed to facilitate and encourage information and knowledge sharing can be major and profound. KM therefore extends far beyond just structuring information and knowledge and making it more accessible.

As this recognition unfolded, two major themes from the business literature were brought into the KM fold. The first was Senge's work on the learning organization. The second was Nonaka's work on "tacit" knowledge and how to discover and cultivate it. Both were not only about the human factors of KM implementation and use; they were also about knowledge creation as well as knowledge sharing and communication. The hallmark phrase of Stage 2 was "communities of practice." A good marker of the shift from the first to the second stage of KM is that for the 1998 Conference Board conference on KM, there was for the first time a noticeable contingent of attendees from HR, human resources, departments, and by the next year, 1999, HR was the largest single group, displacing IT attendees from first place.

3.3   Taxonomy and content management

The third stage developed from the awareness of the importance of content, and in particular the awareness of the importance of the retrievability of content, and therefore of the importance of the arrangement, description, and structure of that content. Since a good alternative description for the second stage of KM is the "it's no good if they don't use it" stage, then in that vein, perhaps the best description for the new third stage is the "it's no good if they try to use it but can't find it" stage. Another bellwether is that TFPL's report of their October 2001 CKO (Chief Knowledge Officer) Summit reported that for the first time taxonomies emerged as a topic, and it emerged full blown as a major topic (TFPL, 2001 Knowledge Strategies – Corporate Strategies.) The hallmark phrases emerging for the third

stage are content management (or enterprise content management) and taxonomies. At KMWorld 2000 a track on Content Management appeared for the first time, and by the 2001 KMWorld Conference, Content Management had become the dominant track. In 2006, KMWorld added a two-day workshop entitled Taxonomy Boot Camp, which still exists today. The hallmark terms for the third stage of KM are taxonomy and content.

4 CHAPTER. KM ACTUALLY

Besides of the enhancement of process of hiring, integration and personnel training, knowledge management assumes also such specific functions of management as forming of reserve managerial structure. Thus mass investments to the sphere of knowledge are explained by a number of factors, among which: rough progress of information and communication technologies and increasing complexity of the financial relations that raises requirements to qualification of employees, their flexibility and readiness for training; the globalization forcing many organizations to adjust customer relations within a global information network; competition aggravation and fall of the prices of separate services that forces banks to increase performance.

It's important to notice that knowledge management is effective when, at least, the financial effect from the knowledge created and delivered to the consumer by means of this system, exceeds direct and indirect finance costs on creation and knowledge management system maintenance. As a maximum, investments into creation and maintenance of such system should be more effective (according to the financial criteria), than alternative investment competitors (with whom the projects are forced to compete always – and in favorable conditions, and, especially, in the conditions of crisis).

It is obvious that the highly effective knowledge management system is really necessary. As a result of its implementation each employee should receive the personal order on the workplace, and a convenient access to all the necessary knowledge for accomplishment of the service duties in a responsibility zone. Such workplace is called "corporate cockpit", by analogy to a warplane cabin.

The foundation of "corporate cockpit" is necessary to show, how products and/or company services help the company client to create and/or use most effectively above described "system of corporate cabins".

In spite of the fact that the exact cash equivalent of cost of knowledge in the organization can't be calculated, there are some criteria of measurement of their economic value. The difference between market value of the company and cost of its tangible assets is one of cost indexes of intangible assets the majority from which represents organizational knowledge. Only from 6 to 30% of cost of the company contain the assets mentioned in traditional balance statements; the rest is intangible assets. Thus, 50% of investments of production companies are the non-material spheres, such, as scientific researches and developments, training, etc. Many large companies spend more sums, than for other expenditure items for a salary, and pay to certain employees much more, than the rest. What does the company get by that high expenses? Working experience and knowledge which develop empirical rules, create judgments and direct the search of models and semantic decisions.

It shall be helped by openness of management and trust. The capability of the organization to perceive the knowledge, to extend them and to operate in coordination on a basis of this

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knowledge determines its capability to be trained. In the last decades a wide circulation in the world gained the concept and practice of life-long education as a package of measures which is giving the chance to the person to study during all his life by the theory of "educational value in any place, at any time and any content". It is acknowledged that distribution of educational resources of the person during all his life, instead of their concentration during strictly certain period is reasonable. It assumes forming of system of life-long education taking into account self-training with consulting and methodical support (the organization of a network of open universities, distance training, etc.).

Thus, there is the direct interaction between knowledge management and the top-management representing its five main functions – planning, organization, motivation, control and communication.

Business-forum on Knowledge Management was held in Moscow on 25-26 of October 2010 as a part of Top Class International series. It was the first professionally managed event on knowledge management in Russian history. 175 participants from 8 countries took part in the forum. Top-managers and professionals in the field of knowledge management form Fortune Global Top 500 companies Lukoil, TNK-BP, Sberbank, Rosneft and other Russian largest companies like ROSATOM, Rosgosstrakh, Uralsib, Domodedovo and Sheremetyevo airports attended the event. 6 international and more than 20 Russian speakers, including Larry Prusak (consulting NASA and World Bank Group, USA), Nick Milton (director and co-founder of Knoco Ltd, Great Britain), David Snowden (the founder and Chief Scientific Officer of. Cognitive Edge, Great Britain- Singapore) shared their ideas with the audience. This forum shows that Russia really keeps go a long way of knowledge itself, of knowledge based on the industries and of knowledge institutions of processes that would certainly bring more complex and more product in economics for Russia. Innovation and collaboration are two main drivers of the knowledge activity in the world, and the Russian specialists are ready to concentrate their forces upon them both.
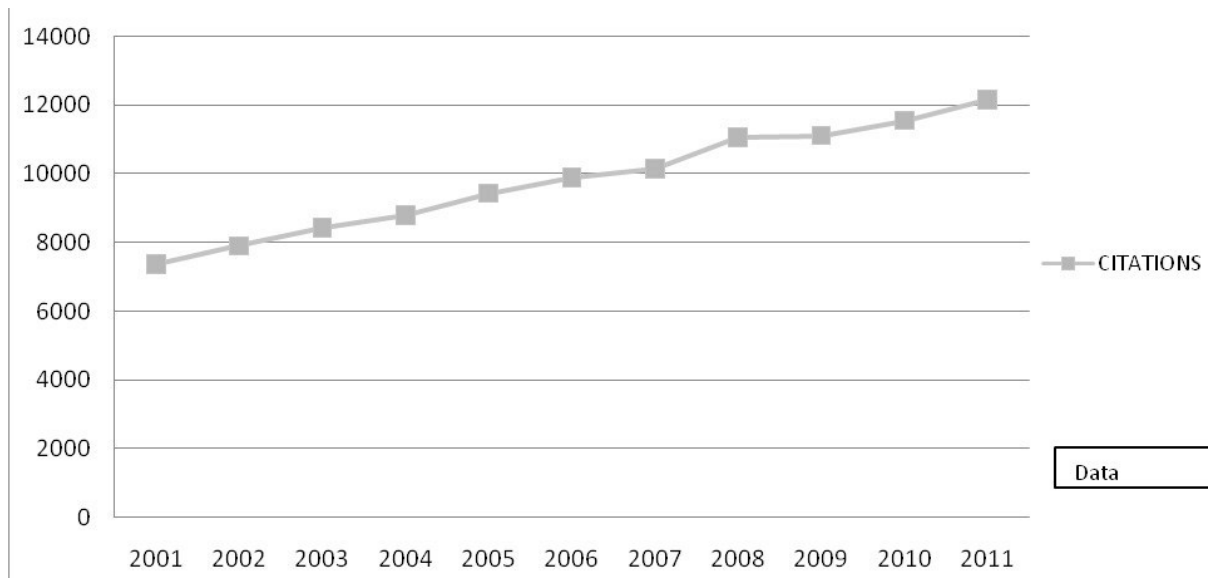
Chart 1: KM growth 2001 through 2011

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In November 2012 representatives from different fields of knowledge management - government officials, scientists, entrepreneurs, marketers, bloggers have met again at the 3-d annual Business Congress TOP-CLASS INTERNATIONAL "Knowledge Management Russia - 2012" to discuss the problems of implementation of knowledge management in Russian companies, its particular qualities in various fields, its impact on the development of Russian business. They looked at examples of the implementation of knowledge management practices of Russian (Russian Railways, Sberbank of Russia, etc.) and foreign companies. Special attention was given to the subject development of Russian knowledge-community, cooperation (including the creation of social projects) between government, business, academia and representatives of social media - bloggers as centers of formation of public opinion.

The program of the congress included reports and discussions on the following subjects:
1. new trends in world practice of knowledge management,
2. methodology of idea management,
3. approaches of open innovations,
4. technologies of crowdsourcing,
5. methods of identification and use of tacit knowledge,
6. mechanisms of formation of strong teams,
7. knowledge sharing,
8. the tools, allowing to enrich and strengthen knowledge of each other.

The 4I system is developed by specialists of the TEKORA company on the basis of technology of activization and use of intellectual potential of employees. The 4I system is implemented in the largest companies of Russiam such as JSC RZhD, JSC OGK-3, etc.

4I system ("Information Incubator of Innovative Ideas") – a communication platform for management of ideas:
- activise the intellectual potential of the company staff and creates conditions for identification and formalization of the hidden knowledge;
- allows to direct intellectual efforts of employees to the search of the solution of the actual problem facing the company;
- automates the process of handling of offers, involving in process staff of the company and reducing load of experts and the persons making the decision;
- allows to reveal the most actual offers with the minimum costs of time and resources;
- helps to adapt and make use of experience and knowledge of the employees, to extend the best practicians in the company;
- promotes to create the teams and build the horizontal communications of staff of the territorial distributed companies;
- reveals the employees possessing unique knowledge.

5 CONCLUSION

In an organizational context, data represents facts or values of results, and relations between data and other relations have the capacity to represent information. Patterns of relations of data and information and other patterns have the capacity to represent knowledge. For the representation to be of any utility it must be understood, and when understood the representation is information or knowledge to the one that understands. Yet, what is the real value of information and knowledge, and what does it mean to manage it?

Without associations we have little chance of understanding anything. So here is our example. When a boss asks what will be the quantitative and quality result by the end of the month, a responsible manager will answer "I can't predict, because there are many factors which may influence on the final product". He will be confused because he used to operate the data, the information, but not the knowledge itself. Data doesn't predict trends of data. What predicts trends of data is the activity that is responsible for the data. To be able to estimate the sales for next quarter, the manager would need information about the competition, market size, extent of market saturation, current backlog, customer satisfaction levels associated with current product delivery, current production capacity, the extent of capacity utilization, and a whole host of other things. When he will be able to form a complete pattern he will have knowledge, and will then be somewhat comfortable estimating the sales even for next quarter.

The value of Knowledge Management relates directly to the effectiveness with which the managed knowledge enables the members of the organization to deal with today's situations and effectively envision and create their future. Without on-demand access to managed knowledge, every situation is addressed based on what the individual or group brings to the situation with them. With on-demand access to managed knowledge, every situation is addressed with the sum total of everything anyone in the organization has ever learned about a situation of a similar nature.

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CAPITAL STRUCTURE CHOICE AT DIFFERENT LIFE-CYCLE STAGES IN TURBULENT ENVIRONMENT: THE EVIDENCE FROM RUSSIAN EMERGING CAPITAL MARKET

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ABSTRACT

We examine the motives of capital structure choices of a broad sample of 11 thousands nonfinancial companies at different stages of their life cycle (LCO) in the emerging capital market of Russia. To identify the life-cycle stages we use the rating method based on a combination of financial measures. We identified the determinants of the capital structure and applied the tests for pecking order (PO) and trade-off (TO) models of capital structure choices to the general sample and at each life cycle stage. We have found that LCO stage is a significant determinant of a company's capital structure in Russia. We show that the research models based on PO and TO concepts have different explanatory power varying through life-cycle stages: trade-off theory is more applicable for the companies at the growth stage, while pecking order better explains the company's behaviour at the stagnant stage. Sectorial analysis provided further interesting insights: TO prevailed over PO on all LCO stages for the companies in mining, transport, service, construction and manufacturing industries; PO theory shows strong significance on stagnant stage for the companies in wholesale and agricultural sectors.

Keywords: Capital structure, Emerging capital market, Financing policy, Life cycle of organization

1 INTRODUCTION

The concept of the organizational life cycle (LCO) is associated with the management theory and explains the organic changes within organization. LCO describes significant differences between the stages which are due to the competition's challenges, internal conflicts of interests and management dilemmas. As long as the financing policy of the firm depends on strategic goals in operating and investment activities, it should change in line with transition of the firm thru LCO. Economic literature provides no uniform view on financing policy at different stages of LCO, therefore the empirical analysis from this perspective is important for in-depth understanding of capital structure choices.

We contribute to the literature by identifying the impact of LCO stages on capital structure decision-making. We provide new empirical results on financing policies in specific environment of emerging capital markets. We found clear differences in the motives of

financing policies of the Russian companies at different LCO stages. Finally, the paper also shows that industries matter for the capital structure choices at different LCO.

The paper also refines the technique of identification LCO stages for specific environment in emerging capital market using the data of the Russian companies. The results showed sustainable differences between companies at LCO stages. Therefore the technique based on financial metrics can be applied to a broad spectrum of research problems in corporate finance in order to carefully adjust the research to the specific nature of each LCO stage in emerging capital markets and promote further specification of available researches.

The paper is organized as follows. Section 2 provides overview of existing literature in LCO stages identification and theoretical background for the research. In section 3 we explain the sample selection procedure, the methods used for LCO stage identification and the results. Section 4 provides the arguments for the research model for financing choices at different LCO stages. Empirical results and alternative explanations are discussed in section 5.

2   IDENTIFICATION OF LCO STAGES

Despite diversity of LCO models concerning the number of stages, their key characteristics the existing papers are generally based on three of them: L. Greiner, I. Adizes, D. Miller and P. Friesen models.

The L. Greiner model (1972) is the earliest LCO model which emphasizes five main phases: creativity, direction, delegation, coordination and collaboration. This model considers the development of the firm only in the positive direction that imposes restrictions on a range of the companies to which it can be applied. Besides, this model doesn't define the ending points of LCO. The model proposed by I. Adizes (1988) is a complex theoretical model which consists of 10 stages starting with the courtship when only the idea of the future organization appears to the death, a concluding stage of LCO. In contrast to L. Greiner, I. Adizes shows not only a managerial problems and dilemmas of each stage, but also corporate culture and organizational climate. The second difference is that the author considers not only an ascending curve of organization activity, but also descending part, responsible for movement to "death".

D. Miller and P. Friesen (1984) summarized and integrated earlier researches and proposed condensed 5-staged classification of LCO. At a birth stage the firm makes attempts to become viable entity in some specific area. The growth phase is characterized by achieving initial success in the industry with a firm reaching distinctive characteristics. At the maturity stage sales level stabilizes, the degree of innovative implementations falls and bureaucracy develops in the organization. Usually the revival stage represents processes of diversification and increase in production level. The final stage – decline – is characterized by stagnation when the firm "is dried up" together with the market as a whole.

However it is necessary to mention that condensed version of LCO stages is usually used from a perspective of financial analysis than in the analysis of organizational activities. It is due to the need to receive the quantitative estimates of firm's parameters related to each stage of LCO, and to construct the expected financial models requiring certain assumptions and simplifications to reflect the reality. Therefore 5-staged D. Miller and P. Friesen model is the most frequently used model or its reduced option with three or four life cycle stages.

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Initially the theory of LCO was developed within management and marketing fields of activity of the companies, however the decisions made by managers are bound to influence operating, investment and financial activities. J. Anthony and K. Ramesh (1992) revealed that the influence of unexpected changes in growth of revenue, capital expenditure and in profit on stock returns differs between growing and mature firms. E. Black (1998) confirmed the assumption of growing influence of net profit on the share price in process of its transition to the subsequent stage of LCO. D. Jenkins et al. (2004) shows that at a recession stage the profitability has higher impact over market capitalization as compared to the revenue growth due to the development of new products necessary for saving market power. V. Dickinson (2006) in her paper showed the role of previous profitability changes, growth of net operating assets, dynamics of operating margin and assets turnover for predicting future profitability depending on the current LCO stage of the frim. H. DeAngelo, L. DeAngelo, and R. Stulz (2006) show that dividends, in most cases, are paid by the companies which have reached maturity stage. Besides dividend policy, the LCO stage to a large extent defines as well capital structure policy: G. Teixeira and M. Santos (2005) in their empirical study proved that financial leverage reaches its maximum at the growth stage and then decreases in process of firm's transition to later stages. Therefore it is possible to draw a conclusion of the importance of understanding the current LCO stage for carrying out correct research of investing, financing and dividend policies. However currently there is no single conventional algorithm capable to define at what stage of LCO a company was in a specific time frame.

Existing literature provides different approaches for identification of LCO stages based on financial measures which can be classified into two groups. According to the first approach LCO stage of the company is determined irrespective of characteristics of other organizations (Grabowski and Mueller, 1975; Dickinson, 2006; Miller and Friesen, 1984). The second approach is based on the research ratings by a specific index or group of indices (Anthony and Ramesh, 1992; Pashley and Philippatos, 1990). The second group of methods will be much more preferable to develop research model for large samples, however it requires more accurate financial statements, cash flows data, etc. The rating methods are applicable for the analysis of a broad sample of companies which ideally represent full range of industries in the economy.

3 THE RESEARCH MODELS FOR LCO STAGES AND THE SAMPLE

The sample includes 11688 Russian joint-stock companies for the period of 2000 to 2009 collected from the Ruslana Bureau Van Dijk database with overall 71130 firm-year observations. The companies of financial sector, social services, and also the government institutions and organizations are not included. As research requires existence of wide range of the companies, including the firms at the early stages of LCO we applied the criteria of minimum 1 million US dollars for the sales revenues or the total assets. Industry structure of the sample is rather balanced with little shift to manufacturing companies. Holding companies were excluded to limit the effect of non-consolidated financial statements under Russian financial accounting standards.

The technique of J. Anthony and K. Ramesh (1992) was used as a basic approach for understanding LCO curve. Due to the scarce data on several financial measures we adjusted the technique to the availability of the data. We changed two out of four classification variables used for ranking. Therefore, four variables are used:
1. the age (AGE) calculated as a difference between the current year and year of incorporation of the company;

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2. the growth rate of sales revenue (SG) calculated as follows:
   $$SG_t = (Sales_t - Sales_{t-1})/Sales_{t-1};$$
3. retained earnings to total assets (RE/TA);
4. the change in net fixed assets to total assets (NFA/TA): NFA/TA_t = ((net tangible assets$_t$ + net intangible assets$_t$) - (net tangible assets$_{t-1}$ + net intangible assets$_{t-1}$)) / assets.

These financial variables are calculated for each firm-year. Then for each variable (SG, RE/TA, NFA/TA) we found a median. It requires at least three observations in a row for each company. Median values are indicated as MSG, MRETA, MNFA/TA.

Table 1: Assignment of scores

Interval	Score			
	AGE	MSG	MRETA	MNFA/TA
0-33 %	1	3	1	3
33-66 %	2	2	2	2
66-100 %	3	1	3	1

According to expected behaviour of variables at each LCO stage all observations are classified by each variable into three groups or respectively three stages of LCO: growth, maturity and stagnation. The higher the total score of the firm the later the stage at its LCO. The ratio of retained earnings to total assets (MRETA) is assumed to increase with transition to later stages. On the contrary, the pattern for the variables describing sales revenue growth (MSG) and capital expenditure (MNFA/TA) is reverse: the higher values for them are expected at early stages.

According to the method developed by Anthony and Ramesh (method 1) for each observation the firm-year total score is calculated. Then all observations are splitted into three quantiles corresponding to three life cycle stages. The lower values of total score correspond to an early stage of LCO. Such classification was made for each year, that's why each observation is assigned to particular LCO stage. However this approach is based on the assumption of even distribution of the companies between the stages.

Following approach proposed by Jenkins distribution of observations on a total score is made by five stages: growth, growth/maturity, maturity, maturity/stagnation and stagnation. After that the observations which were in the intermediate stages (growth/maturity, maturity/stagnation) are eliminated. The observations in the final groups or three main stages are more homogenous than according to the previous method.

The data on the companies assigned to each LCO stage according to the method 1 is provided in the table 2.

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Table 2: Distribution of the companies by stages according method 1

	2003	2004	2005	2006	2007	2008	2009	Total
growth	3153	3383	3606	3562	3815	6220	3895	27634
maturity	3544	3837	4058	4207	4571	2701	4504	27422
stagnation	1960	1888	1997	2457	2646	2471	2655	16074
Total	8657	9108	9661	10226	11032	11392	11054	71130

In total about 36 % firm-year observations were assigned to the growth stage, 41 % to a maturity and 23 % to a stagnation stage (we do not use 2008 year in calculation because of high influence of crisis). The smallest number of the companies is assigned to a stagnation stage that is rather adequate reflection of the reality as the majority of the Russian companies have short history. The results of the application of the method 2 are given in table 3.

Table 3: Distribution of the companies by stages according to method 2

	2003	2004	2005	2006	2007	2008	2009	Total
growth	1750	3383	3606	3562	3815	3437	3895	23448
maturity	1742	1830	1956	2035	2221	2701	2125	14610
stagnation	679	600	674	935	1001	709	995	5593
Total	4171	5813	6236	6532	7037	6847	7015	43651

The growth stage includes about 54 % firm-year observations; 33% firm-year observations correspond to a maturity, and 13 % to the stagnation stage. Remaining 27479 observations within the intermediate stages were eliminated. The number of the observations assigned to the growth stage according to the second method remained practically at the same level as in the first one. At the same time the number of observations at a maturity was reduced practically twice, and number of observations at stagnation stages – three times. Therefore the characteristics of the firms at growth stage appeared more clear and sound, than that of the companies at other LCO stages.

4   FINANCING POLICY THROUGH LIFE CYCLE STAGES

The studies of financing policy at early life cycle stages mostly show that internal financing is primary source for funds. Comparison of financing policy of the small and large companies shows that larger companies have higher debt level and follow pecking-order theory while for the small fast-growing companies it is not confirmed (Murray and Goyal, 2003). Z. Fluck, D. Holtz-Eakin and H. Rosen (1998) in their research showed that the proportion of financing received from insiders increases at early life cycle stages while the proportion of external financing falls. However at some point this relation becomes reverse. Authors explain this result by development of reputation of the company in the debt markets that allows it to receive cheaper sources of external financing. C. Ou and G. Haynes (2003) assume that very insignificant number of the small companies uses external equity financing and the majority of firms use internal sources of financing or external loans. A. Robb (2002) shows that the young companies use rather more debt, than more mature ones though the younger ones experience more difficulties with collateral for banking loans.

D. Diamond (1991) in his research tries to explain the differences in financing policy for each LCO stage showing that the companies can rely either on banking, or on public loan financing in developing their reputation to fit debt market requirements. I. Ivanov (2010) shows

reduction of debt level when company advances to maturity stage and then its increase at decline stages with the sample of the Russian companies.

According to S. Myers (1984) capital structure is subject to influence growth opportunities due to the problem of lack of investments. Therefore the companies at earlier stages can use short-term loans to solve this problem. D. Diamond (1991) also assumes that the companies having information on favourable growth opportunities can use short-term loans. D. Diamond highlights a liquidity problem for debt maturity structure, so the companies with a high credit rating can be inclined to a choice of a short-term debt while the companies with a low rating will prefer long-term loans.

In the following section we will formulate main hypotheses which will be tested within this research.

The hypotheses:
H1: If the firms are following pecking order of financing then the changes in debt level are determined by the financing deficit, the intercept (equation 1) will be zero and the β is equal or very close to 1:

$$\Delta D_{it} = \alpha + \beta Def_{it} + \varepsilon_{it} \tag{1}$$

The independent variable *Def* characterizes a financing deficit and is defined as the amount of an investing cash flow and dividends minus an operating cash flow.

The trade-off theory assumes, that the company aims to target capital structure.
H2: If the firms are following trade-off logic of financing then the change in debt is determined by the target financial leverage and therefore the intercept is zero (equation 2), and the beta is positive but lower than 1:

$$\Delta D_t = \alpha + \beta(Dtarget_t - D_{t-1}) + \varepsilon_{it} \tag{2}$$

The *Dtarget* represents the target debt level which can be defined on the basis of expected values of the regression equation derived from the previous analysis of the determinants of capital structure.

The last stage of analysis is the combined model which consists of independent variables. According to resulting coefficients we could identify the best fit model from equation 3 and therefore the most reasonable explanation of the capital structure choice at different life-cycle stages.

$$\Delta D_t = \alpha + \beta_1(Dtarget_t - D_{t-1}) + \beta_2 Def + \varepsilon_{it} \tag{3}$$

At first step of econometric analysis, we have applied 0.01 and 0.99 quantiles to exclude outliers and executed variation analysis to address multicollinearity problem. Then, specifications of regression equations were examined with Hausman tests: fixed-effect model appeared to fit better than random-effect model and pooled model respectively. Also modified Wald test for homoscedasticity was made: the null hypothesis was rejected, that is why we need to use robust estimations that were received from testing model with heteroscedasticity.

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5   EMPIRICAL RESULTS AND ALTERNATIVE EXPLANATIONS

Having identified life cycle stages of the companies according to Anthony-Ramesh and Jenkins et al. modified methodologies we have tested the stability of resulting life cycle segmentation by comparing selected financial ratios. According to the results ROE and ROCE is falling in line with transition to the further life cycle stages, ROA and ROS are lowest for the growth stage. Financial leverage falls with transition to mature stages, but as it varies significantly within the stages further analysis of capital structure choice which we proposed in our study would better explain the nature of this variation. We also found out that the Jenkins et al. modified method of identification gives more precise results while Anthony-Ramesh modified method remains its legibility for a wider sample.

The analysis of financial policies within LCO includes several empirical tests in which we define the motives for capital structure choice for the firms at different stages. First we proved the importance of LCO for capital structure choice by including LCO-stage dummies in pecking order of financing (PO) and trade-off (TO) models which turned out to be significant. Than we analyzed PO, TO and combined models for every LCO stage and both methods of life cycle stage identification. The results for Anthony-Ramesh identification method are presented in the table 4. It is worth mentioning that Anthony-Ramesh method and Jenkins et al. method showed practically the same results.

Table 4: Capital structure theories testing for different life-cycle stages (Anthony-Ramesh identification method)

Trade-off model

Variable	TDR growth	TDR mature	TDR stagnant	TDRA growth	TDRA mature	TDRA stagnant
dtarget	.7069***	.6341***	.6567***	.677***	.6046***	.6515***
_cons	0.0017	.0044***	.0037***	.0023**	.0036***	.0028***
N	22694	24054	14262	22700	24059	14263
r2	0.4146	0.3512	0.3406	0.374	0.3135	0.3254
r2_a	0.1202	0.0084	-0.0575	0.0595	-0.049	-0.0819

Pecking-order model

Variable	TDR growth	TDR mature	TDR stagnant	TDRA growth	TDRA mature	TDRA stagnant
def1	.4907***	.6039***	.6478***	.514***	.5454***	.5508***
_cons	-.0294***	-.0199***	-.0158***	-.0297***	-.0198***	-.0145***
N	22697	24057	14262	22703	24062	14263
r2	0.0919	0.1426	0.1687	0.2123	0.223	0.214
r2_a	-0.3647	-0.3104	-0.3333	-0.1838	-0.1874	-0.26

Combined model

Variable	TDR growth	TDR mature	TDR stagnant	TDRA growth	TDRA mature	TDRA stagnant
dtarget	.6717***	.5815***	.584***	.586***	.5162***	.5564***
def1	.3388***	.4529***	.4702***	.3665***	.4215***	.4111***
_cons	-.0222***	-.019***	-.015***	-.0232***	-.0179***	-.0134***
N	22694	24054	14262	22700	24059	14263
r2	0.457	0.4289	0.4253	0.4758	0.44	0.4379
r2_a	0.1845	0.1271	0.078	0.21	0.1441	0.0983

legend: * $p<0.1$; ** $p<0.05$; *** $p<0.01$; TDR – relation of long-term and short-term percentage debts to the total debt and accounting cost of its share capital; TDRA – relation of total value of obligations to the accounting cost of its assets

According to the table 4 we could conclude that PO motives for capital structure choices are weaker for the firms at the growth stage, but they become more valuable for stagnant stage. As for the growth stage of LCO the motives of trading off between marginal benefits of debt versus marginal costs (TO) have the higher power to describe capital structure choices.

It is important that coefficients for the variables varied for different life cycle stages but their signs remained the same. Testing of the trade-off theory showed the significance of independent variable at all stages, thus the greatest value of coefficient corresponds to a growth stage. Within the pecking order theory the coefficient at Def variable was significant at all stages, but its greater value corresponds to a stagnation stage. Pecking order theory can not explain fully the capital structure choices at any LCO stage, but the significance of the coefficients at deficit (Def) predetermines the need for testing combined model. On the basis of results of separate models, as well as with the results of combined tests it is possible to draw a conclusion on lower applicability of PO theory for capital structure choices at the

growth stage and on its higher significance for the companies at a stagnation stage. The TO theory provides strongest explanation for the growth stage and is also applicable at other stages. Finally, the analysis of combined model showed the dominance of the TO theory for the growth stage, while the PO theory better explains financing policy for the companies at a stagnation stage.

The sectorial analysis for agricultural sector revealed a high coefficient at the variable Def (~0.86) on stagnant stage in case of PO theory, but an equal role of both explanations is still observed in case of combined model. The TO theory prevailed over PO theory in case of mining sector, especially on the stagnant stage: the Def variable was insignificant in the combined model. Similar dominance of TO theory is evident for transport and service sectors, moreover for the companies in service sector the beta coefficient at independent variable is close to 1 (~0,99). Similar results were obtained for construction and manufacturing industries. The PO theory is not confirmed on stagnation stage for the retailers. The TO theory is prevalent for growth and maturity stages for the wholesale trade, but PO theory becomes significant on the stagnation stage.

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EUROPEAN UNION REGIONAL POLICY AS A TOOL FOR EFFECTIVE INTENSIFICATION OF INTERREGIONAL COOPERATION

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ABSTRACT
The aim of the paper „European Union regional policy as a tool for effective intensification of interregional cooperation" is to provide an overview of European Union regional policy. Regional disparities among Polish regions are significant that is why the article presents the attempt of the identification its size. Moreover the paper focuses on interregional cooperation which is the priority during integration process nowadays and it will be one of the most important branches in the next programming period.

Keywords: *European integration, Interregional cooperation, Regional policy, Regions*

1 INTRODUCTION

The disparities in regional development have been present in the policies pursued by individual economies for centuries. Inability to deal with this matter resulted primarily from the lack of basis for the functioning of regional policy. Economic reality in the member counties of the European Union, however, forced the evolutionary approach to the sphere of economic life, which is the regional policy. In the era of the formation of functioning of the European Union's regional policy increasingly important is becoming the knowledge about the effects of European integration, which is largely initiated by enhancing cross-border and the euro-regional cooperation.

The aim of this paper is therefore to present the evolution of the concept of regional policy of the European Union in the context of European integration. The author pays special attention to the aspect of cross-border cooperation, which is going to play an important role in integrating Europe over the next few years.

This work consists of three main parts. The first part will indicate the key assumptions of the new strategy *Europe* 2020 *for smart, sustainable and inclusive growth*, that is the long-term plan for socio-economic growth of the European Union. In the second part the content of regional policy will be briefly presented. Particular emphasis will be placed on the presentation of the main objectives of the cohesion policy for 2014-2020.

2 REGIONAL POLICY OF THE EUROPEAN UNION - ITS ORIGINS AND DEVELOPMENT

The lexicon of regional policy indicates that in the context of the European Union the regional policy means an intended influence, in a form of intervention, of the authorities and European institutions on economic growth and social development in order to achieve sustainable development (Kundera and Szmyt, 2008, p. 78). This definition means that the entire regional

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policy realized within the European Community or by the authorities of individual countries refers to the creation of equal opportunities of development for the regions and especially to helping underdeveloped areas with severe underdevelopment. The efforts made by the European Union in the area of regional policy focus on strategic activities carried out in cooperation with governments of voivodships and other local government entities whose purpose is to improve the competitiveness of the economies of individual regions, to create equal development opportunities and to achieve social, territorial and spatial cohesion (Grosse, p. 14).

The regional policy of the European Union together with the actions taken by the government of the member country can bring benefits to the entire European Community. The reasons for combining these policies are:

- Financing. Poor member countries are not able to solve their own regional problems, so the European Union grants financial aid to mitigate the negative effects of regional issues.
- Achieving externalities. Solving regional problems in one region or member country is beneficial for the entire Union, even by gaining new experiences that can form the basis for further evolution of regional policy.
- Achieving the effects of integration. It primarily means the activation of redistribution mechanism which helps reduce disparities within the Community.
- Coordination of other policies (Apap, Kaniewska, Sitek, Walewski and Szczygielski, 2003, p. 30).
- Reduction of Poverty, (Dearen, 2004, p. 17) thatis why the developing, low-income countries often have the priority in the allocation of resources within the European Union's regional policy.

Contemporary regional policy on different levels, e.g. regional, national and European, is characterized by a high degree of intervention. The regional level is represented mainly by local authorities which carry out regional objectives by helping local entrepreneurs. On the national level, regional policy aims at reducing the inter-regional disparities within the country, while the European level refers to the regional policy on a global scale, which primary goal is to achieve a similar level of economic development of all European Union countries. On all those three levels, there are tasks, which main objective is eliminating disparities in regional development. The current form of regional policy within the European Community resulted from many factors, which over time enabled the process of evolution from the regional policy with a very limited scope to the policy being an essential element of economic policy.

The issue of regional development based on common principles has been ignored for many years. For a long time it did not become the subject of solutions applied within the Community and was taking the form of a declaration rather than concrete actions and solutions. It was the adequate annotations of the 1957 Treaties of Rome, establishing the European Economic Community and the European Atomic Energy Community, which included concern for the development of regions in the EU member countries. One of the major activities of the Community at the time was expanding resources through the valorization of regions lagging behind and the use of unemployed workforce (Pietrzyk, 2004, p. 62). It was the de facto the first material evidence of the existence of contemporary regional policy. The purpose of the newly established European Economic Community was to strengthen the unity of the economies by ensuring their harmonious development

(Tkaczyński, Marmot and Villa, 2008, pp. 43–46). It was expected that the effect of the EEC will be a reduction of development disparities between regions. With the establishment of the European Economic Community the European Social Fund and the European Investment Bank started functioning and have been operating until now. The first one to a large extent carries out the tasks from the field of human resources, while the European Investment Bank is an instrument which aims at increasing the competitiveness of weaker regions through investment in modernization and creation of new businesses (Wojtaszczyk, 2005, pp. 33–34).

3   REGIONAL DISPARITIES OF POLISH REGIONS

The economic and social disparities in the European Union can be easily seen. Their perception does not require precise indicators showing the level of regional and socio-economic development. Currently the richest region of the Community is the Inner London, where the GDP per capita is 290% of the EU-27 average. By contrast, the north-eastern part of Romania is the poorest region and generates only 23% of the average GDP of the EU (Laissy, 2008, p 4). The reason for this huge development gap between countries belonging to the European Union is that regional policy is the responsibility of individual governments. Regional policy based on the principles of the Community covers primarily the identification of areas and the extent of support for individual governments within independent regional policies of the member countries.

Regional policy - as it has been repeatedly mentioned, has become in recent years the most important mechanism of reducing regional disparities. The attention in the literature of the subject is drawn to the fact that government intervention should be directed to the poorest regions and its key objective should be restructuring of the economy. In the era of functioning of the European Union it has become one of the key dimensions of its activity. The help provided by the European Communities is crucial also for Poland. The actions taken in order to reduce regional disparities are rational when the dimensions of the problem to be tackled are known and the next stage of this work will therefore be to answer the question: How large are disparities between the regions in Poland? Answering this question will make the objectives and principles of the regional policy of the European Union towards Poland much more clear.

Table 1: The main measures indicating the diversity of Polish regions, as of the year 2008 (CSO, Katowice 2010, pp. 58, 73, 75; http://www.stat.gov.pl/gus/5840_1487_PLK_HTML.htm?action=show_archive; GUS, Warszawa, 2009, pp. 112–113, 166; Regiony Polski, 2010, pp. 4, 20, 24.)

Voivodship	Population density per km².	GDP per capita in zl and %	Total output in zl and %	Avelage salary in zl	Nominal income of households per capita in zl	Unemployment rate	Investment outlays in %	Expenditures on R&D and innovation activity .
Poland	122	33462 (100%)	2670006 (100%)	-	21869	9.1	100%	100%
Dolnośląskie	144	35989 (107,6%)	225663 (8.5%)	2978,50	22612	9.5	8.5	5.9
Kujawsko-Pomorskie	115	28926 (86,4%)	124680 (4.7%)	2589,30	19718	12.6	4.6	1.7
Lubelskie	86	23219 (69,4%)	94170 (3.5%)	2577,68	16253	10.8	3.5	3.1
Lubuskie	72	28709 (85,8%)	60424 (2.3%)	2563,04	19114	11.5	2.0	0.4
Łódzkie	140	31140 (93,1%)	155760 (5.8%)	2621,35	21277	9.1	6.8	5.5
Małopolskie	217	28878 (86,3%)	190170 (7.1%)	2834,67	19115	7.1	7.4	11.6
Mazowieckie	140	52770 (157,7%)	587129 (22.0%)	3997,81	31647	7.4	21.8	43.1
Opolskie	110	28379 (84,8%)	61497 (2.3%)	2770,12	18203	9.1	1.8	0.5
Podkarpackie	118	23101 (69,0%)	97104 (3.6%)	2461,16	15732	12.4	3.6	2.3
Podlaskie	59	24434 (73,0%)	59625 (2.2%)	2642,69	17480	8.9	2.2	1.0
Pomorskie	121	31754 (94,9%)	155108 (5.8%)	3093,90	21495	8.2	6.4	5.2
Śląskie	377	36126 (108,0%)	366436 (13.7%)	3146,66	23741	6.9	12.6	7.9
Świętokrzyskie	109	26763 (80,0%)	68112 (2.6%)	2605,72	17799	13.4	2.6	1.2
Warmińsko-Mazurskie	59	24814 (74,2%)	72953 (2.7%)	2514,85	17399	15.5	2.7	1.0
Wielkopolskie	114	34934 (104,4%)	251346 (9.4%)	2791,97	22845	5.9	9.3	7.9
Zachodniopomorskie.	75	30357 (90,7%)	99828 (3.7%)	2774,61	21430	12.6	4.2	1.6

The purpose of presenting this table is an attempt to explore regional differences in the Polish voivodships. It has to be noted, however, that the presented indicators are fragmentary in nature, which means that the in-depth analysis of regional disparities requires the use of appropriate research methods and the application of adequate measures. Though, the analysis of the table components lets identify fundamental differences between Polish voivodships.

The last step showing differences between Polish regions is identifying, based on the above table, the regions with the best values of indicators and those with the worst and then determining the scale of imbalance between them.

Table 2: The most and the least developed regions in Poland

The most developed regions:	Population density	GDP per capita	Total output	Average salary	Nominal income of households per capita	Unemployment rate	Investment outlays In %	Expenditures on R&D and innovation activity
Mazowieckie	140	157,7%	22.0%	3997,81	31647	7.4	21.8	43.1
Śląskie	377	108,0%	13.7%	3146,66	23741	6.9	12.6	7.9
Wielkopolskie	114	104,4%	9.4%	2791,97	22845	5.9	9.3	7.9
The least developed regions:								
Warmińsko-Mazurskie	59	74,2%	2.7%	2514,85	17399	15.5	2.7	1.0
Podlaskie	59	73,0%	2.2%	2642,69	17480	8.9	2.2	1.0
Lubuskie	72	85,8%	2.3%	2563,04	19114	11.5	2.0	0.4
Differences between the highest and lowest value.	**318**	**84.7%**	**19.8 %**	**1482,96**	**14167**	**9.6**	**19.8**	**42.7**

The data presented in the above table shows the scale of disparities between the richest and the poorest Polish voivodships. Table 2 allowed to make the selection, which showed three most developed regions, i.e. Mazowieckie, Śląskie, Wielkopolskie, and the least developed: Warmińsko-Mazurskie, Podlaskie oraz Lubuskie. Among the indicators used for evaluation of voivodships especially GDP per capita, unemployment rate, investment outlays and expenditures on R&D should be mentioned. In case of the first indicator, a substantial difference is observed between the best performing Mazowieckie and Podlaskie which GDP is about half lower. Not without significance for the GDP per capita is the unemployment rate, and that is why the unemployment is the lowest in areas with high Gross Domestic

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Product, and vice versa. As can be seen from the table, unemployment in Mazowieckie is two times lower than in the economically weaker Warmia.

Regional disparities among Polish regions are also visible in terms of investments. The highest recorded GDP accompanies a high level of investments, both in fixed assets and in research and innovation. Forerunner in this regard is again Mazowieckie where as much as 20% of all investments in fixed assets and up to 40% on R & D and innovation is incurred around the capital, which leads to the conclusion that Mazowieckie plays the role of the Polish innovation and competitiveness center.

4 CROSS-BORDER COOPERATION AS A REGIONAL POLICY TOOL FOR INTEGRATION

Interregional cooperation may be internal, that is between the regions inside the country and external, which is defined in the literature as across-border cooperation, also referred to as a form of international cooperation, as it relates to the actions taken jointly by the communities from two or more countries in order to strengthen neighborly relations. Regional policy, regional development, inter-regional cooperation and European integration are undoubtedly related to the concept of the region, which in economic terms is a separate part of the economic environment, permanently inhabited, cultivated and controlled by the community, disposing of a set of resources and conducting bidirectional exchange of goods (Bojar, 2006, p. 5).

Interregional cooperation as well as regional policy has been neglected in the EU structures for a long time. In the current programming period the European Union member countries, thanks to the evolution of regional policy, can now benefit from many forms of interregional cooperation and not only within their own borders. The starting point for this work should be a cross-border region as a basis for further consideration of the issues of cooperation and integration as well as regional and interregional cooperation. The literature treats a cross-border region as the area inextricably linked with geography, history, ecology, ethnic groups, economic opportunities, but separated by having sovereignty of governments on each side of the border. Cross-border region is defined by the following concepts (Greta, 2003, pp. 33–35):

- cross-border region as a border zone.
  Such definition of the cross-border region is mainly derived from the Community Law, which defines the border zone, a region where people are able to benefit from tax exemptions and duties on imports, which refers to any area with a radius of 15 km and which center is a customs post. In this way the cross-border region as a border zone narrows the definition of cross-border region to the territory defined by the selected cultural and socio-economic criteria.
- cross-border region as a pole of attraction.
  Each cross-border region has its characteristic features in the field of industrial activity and therefore these regions are considered in terms of completeness, that is if the cross-border region forms a complete entity, centrality - which is the identification of centers and poles that make up city structures and from the point of view of centres of power, namely, how interests and strategies of the respective groups and social forces are developing.
- cross-border region as an administrative or political unit.

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> Cross-border region is a public territorial unit located below the national level and having a common land border with one or more units of the same type situated in the neighboring country.

A cross-border region is inseparably associated with the concept of cross-border cooperation, which within the current programming period is one of the more important areas of regional policy of the European Union, which is intensifying the integration of the regions of the European Community. Cross-border cooperation is one of the concepts that is well defined in the literature.

A special form of cross-border cooperation is the euroregional cooperation, which is associated with the term euroregion, that is a separate European region located on the border of two or more neighboring countries, and which goal is to accelerate the economic growth and civilizational development and to equalize the level of development with the most developed regions in Europe (Galicki, 1993, p 2). Euroregion is a form of cross-border cooperation between the inhabitants of the border regions. Euroregions do not conform to any law or government institutions and have no direct political power and their role is limited to the power of local authorities, which constitute them. The aim of euroregions is to promote their interests across the border and to cooperate for the good of border communities (Otocan, 2010, p 4). This raises the question of what is the difference between the cross-border region and the euroregion. The definition quoted above shows that the euroregion is a more formalized unit, because it is based on agreements between state, self-government or local organizations. It can also be noted that it is narrower than the concept of a cross-border region. Euroregional cooperation shows similar relations with the concept of cross-border cooperation. Cross-border cooperation is broader and does not require the creation of permanent institutional structures, whereas euroregional cooperation is a form of cross-border cooperation, which introduces the institutional forms of activity - euroregions. Another difference between the two types of cooperation is the time horizon. Euroregion is created with a long-term perspective (Perkowski, 2010, pp. 16–17).

2007–2013 and 2014–2020 are special periods in the functioning of the regional policy of the Community, which is the most important position in the Union budget. The primary and overarching objective which would justify its operation is the need to promote economic growth and sustainable development by mitigating the economic and social inequalities.

The cooperation between the regions of the European Union takes place in many areas, but the most popular are the cross-border cooperation and the following it euroregional cooperation. The European Union considers trans-border activities, as one of the top priorities of regional policy. In the programming period 2007–2013, the European Commission incorporated the third goal: European Territorial Cooperation, which is directly related to cross-border problems in Europe. The budget for this priority continues to be marginal, but the evolution of approach to regional problems and in particular to the problems of cross-border cooperation leads to a growing awareness of the essence of creating effective cooperative relations in the border areas of the member countries.

When reflecting on regional disparities in Poland, which is a member of the European Union, the indicators presented in this paper should be compared with the EU indicators. So the data for 2004 indicates that the Mazowieckie voivodship is comparable with the level development of the poorest region of Greece. The only chance for the gradual mitigation of internal

development disparities is an effective policy of the government, which on the basis of properly and carefully performed studies will be able to take reasonable and beneficial to the whole economy measures to minimize the negative effects of the economic disharmony. Absolutely necessary in these activities is also the support of the European Union, which on a basis of experience in the field of regional policy gained from other members, is able to support Poland in the implementation of plans which will harmonize Polish economic, social and economic reality.

5 THE ROLE OF COHESION POLICY 2014-2020 IN THE EU's ENDAVORS FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH

In order to get Europe out of the economic and financial crisis, the European Commission proposed a new long-term EU development program for the period 2010–2020, which is represented by *Europe 2020 - A strategy for smart, sustainable and inclusive growth*. The document is based on the experience gained from the Lisbon Strategy which was implemented from 2000 till 2010. The European Union, realizing the overarching objectives of the Europe 2020 strategy for employment, research and development, climate change and energy, education and poverty and social exclusion, makes efforts to achieve smart and sustainable development. In order to achieve these objectives it will be assisted by the cohesion policy, which is an integral part of development policy. The financial resources assigned for the area of policy directed to the regions in the new programming period 2014-2020 will amount to one third of the EU budget. This volume shows how vital will be the role of cohesion policy in achieving goals of the EU 2020 strategy. First of all, the cohesion policy means investing in knowledge and development. It creates favorable conditions for innovation, research, education, job creation, social inclusion, information technology, etc.

6 ASSUMPTIONS OF THE DOCUMENT EUROPE 2020 - A STRATEGY FOR SMART, SUSTAIABLE AND INCLUSIVE GROWTH

The Europe 2020 strategy for smart, sustainable and inclusive growth is a document outlining long-term vision of the social market economy. It proposes a new, more powerful model of economic governance. It also assumes a stronger supervision by the European Union, measures protecting the stability of the euro area and the sanative activities in the financial sector (http://ec.europa.eu/europe2020/priorities). Europe's long-term development plan also emphasizes the need to strengthen the management structure by obeying the principle of regular and transparent monitoring and authorities at the highest political level, that is, one might think, the leadership of the European Council.

The Europe 2020 document consists of the following elements:
- 3 priority areas
- 5 main objectives,
- 11 integrated guidelines,
- 7 flagship initiatives.

Standard and continuing priority of the European Union is to accelerate its economic growth and increase employment rate. Europe 2020 document proposes three interrelated and mutually reinforcing priority areas (http://www.mg.gov.pl/files/upload/8418/EUROPA_PL.pdf).

1. Smart growth, which is based on developing an economy based on knowledge and innovation.
2. Sustainable growth, means transformations towards low-carbon economy, which is more environmentally friendly, resource efficient and more competitive.

3. Inclusive growth, is characterized by support for the economy that has a high level of employment and ensures economic, social and territorial cohesion.

The realization of these areas is bound with five main objectives of the whole EU which it will try to achieve within 10 years. However, in order to take into account the specific situation of the individual member countries, all countries in collaboration with the European Commission also appointed their own goals, which are consistent with these five objectives. Countries which economies are more developed and technologically advanced, by virtue of their better starting position, will pursue more ambitious goals.

The main objectives set for the whole European Union are as follows:
Objective 1: Achieving the employment rate of 75% among women and men in the age group of 20-64 years.
Objective 2: Improving the conditions for research and development. In particular the total volume of public and private investment in this sector should reach 3% of GDP.
Objective 3: Reducing greenhouse gas emissions by 20%. It was assumed that the share of renewable energy in overall energy consumption in relation to the level of 1990 will increase by 20%, the energy efficiency will increase by 20%, and attempts to reduce greenhouse gas emissions by at least 20% of will be made by 2020.
Objective 4: Improving the level of education, primarily with regard to the share of young early school leavers, which should not exceed 10%, and the percentage of people aged 30-34 years, who hold a university or equivalent degree, which should be at least 40 % of the total labor force.
Objective 5: Promoting social inclusion, in particular through the reduction of the number of people at risk of poverty and social exclusion by at least 20 million people (www.mg.gov.pl).

All the above-mentioned objectives are to serve smart, sustainable and inclusive development of the EU. All of them are interrelated and interdependent with each other. Employment growth for example will reduce the size of poverty and social exclusion, increase of the level of education will lead to increased employment and it will reduce unemployment and poverty, investments in R&D sector will generate new jobs, resulting in an increase of EU competitiveness, an adequate increase in spending on research and wider use of information and communication technologies will allow to achieve the objectives of low-carbon, environment friendly economy, etc. In 2020, as a result of the achievement of these main objectives it will be possible to assess the overall condition of the EU, measured by the most important parameters, both separately in each country, and at the same time across the EU.
Implementation of five main objectives of the Europe 2020 strategy is to be supported by seven flagship initiatives proposed by the European Commission. Their purpose is accelerating and focusing of implementation methods of the three main strategic priorities. The flagship initiatives are as follows (http://www.mg.gov.pl/files/upload/8418/EUROPA_PL.pdf, p. 5):
1. The Innovation Union is one of the flagship projects of the Strategy.
The research clearly shows that increased investment in R&D to 3% of EU GDP by 2025 would allow to create 3.7 million jobs and to increase the GDP by as much as 795 billion euro per year. Thus the demand for scientific staff in Europe would increase (*Communication from the Commission to the European Parliament*).
The initiative is focused on innovation and the creation of a common market for innovation. Particular attention is paid to the development of the individual stages of the innovation process, from initial research to their implementation and facilitating the transformation of

innovative ideas into new products, technologies, services, etc., which in turn will have impact on economic growth and job creation. Innovation Union strengthens the knowledge base in Europe, eliminates the social and geographical disparities by spreading the benefits of innovation across the European Union. The initiative also supports efforts to pool resources for breakthrough projects through the establishment of European innovation partnerships, associating operators at the EU and the national level.[1]

2. Youth on the move. This initiative emphasizes the need to improve the performance of education systems by providing a high quality academic education, enhance the competitiveness of EU higher education institutions, support for young people entering the labor market by simplifying procedures for foreign study trips and internships outside their home country.

3. Resource efficient Europe directs its efforts to make the EU economic growth independent from resource and energy consumption, and to shift towards a low carbon economy and to increase the use of renewable energy sources.

4. Digital Agenda for Europe. Its mission is to create a single digital market based on a very fast internet and interoperable applications.

5. An industrial policy for the globalization era - aims at improving the business environment, especially for SMEs, strengthening cooperation between industry and science and promoting the development of strong, sustainable and competitive industrial base.

6. An agenda for new skills and jobs, focuses on the modernization of labor markets and strengthens the position of people by developing their skills, teaching new skills and supporting adaptation to the changing social conditions in the labor market in order to facilitate their retraining.

7. The European Platform against Poverty tries to provide economic, social and territorial cohesion and decent conditions for the poor and to enable them to actively participate in society.

All the initiatives proposed by the European Commission are implemented simultaneously both at Community and national level.

The new strategy also includes a set of integrated guidelines, which are general recommendations for countries belonging to the European Union. They relate to different areas of economic policy. These guidelines are to improve the achievement of the five mail objectives of the Europe 2020 document. The number of integrated guidelines, compared with the Lisbon Strategy, has been reduced from 24 to 10.

Below the 10 guidelines proposed by the *Europe 2020 strategy* are presented (www.mg.gov.pl):

Guideline 1 - Assuring the quality and sustainability of public finance.

Guideline 2 - Addressing macroeconomic imbalance.

Guideline 3 - Reducing imbalance in the euro area.

Guideline 4 - Optimizing support for R&D and innovation, strengthening the knowledge triangle and unleashing the potential of the digital economy.

Guideline 5 - More efficient use of resources and reduction of greenhouse gas emissions.

Guideline 6 - Improving the business and consumer environment and modernizing the industrial base in order to ensure correct functioning of the internal market.

Guideline 7 - Increasing the participation of women and men in the labor market, reducing structural unemployment and promoting employment quality.

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[1] Innovation Union – New program within a strategy Europe 2020, European Commission portal (http://ec.europa.eu/commission_2010-2014/tajani/hot-topics/innovation-union/index_en.htm).

Guideline 8 - Developing a skilled workforce corresponding with the labor market needs and promoting lifelong learning.
Guideline 9 - Improving the quality and performance of education and training systems at all levels and increasing participation in tertiary or equivalent education.
Guideline 10 - Promoting social inclusion and combating poverty.

In accordance with the Lisbon Treaty, the guidelines 1 to 6, which are related to economic policies, were approved by the EU Economic and Financial Affairs Council (ECOFIN). Other, related to employment policy, that is 7 to 10, were accepted by The Employment, Social Policy, Health and Consumer Affairs Council (EPSCO) after consulting the European Parliament. The guidelines are the basis for developing by all EU governments the National Reform Programmes (NRP), which are a fundamental instrument for the implementation of the strategy at the level of member countries.

The document *Europe 2020 Strategy for smart, sustainable and inclusive growth* is a concrete plan for the development of the European Union, the effects of the implementation of which should be visible in 2020.

Cohesion policy, through realization of its goals, contributes to the development of the European Union by strengthening such key areas as: innovation, human capital, education and research. In this way it primarily promotes investments in the knowledge-based intelligent information society. Focusing its activities the policy will help in the future the members of the European Union and its regions to cope with the enormous challenge of creating smart and sustainable economy with greater capacity for innovation and more effective cooperation between industry and science.

According to the opinion of the Committee of the Regions "*The contribution of cohesion policy to the Europe 2020 Strategy*", adopted at the 86th plenary session in Brussels on 5 and 6 October 2010, the objectives of the Europe 2020 Strategy will play a key role in EU's cohesion policy. The opinion emphasizes the interdependence of politics and a new development plan for the Union.

7   CONCLUSION
The debate on the new approach to regional policy functioning within the Multiannual Financial Framework 2014-2020 has been going on for quite a long time. Nevertheless, it still requires a number of arrangements and negotiations. Unfortunately the chances for the start-up of national operational programs of the new cohesion policy at the beginning of 2014 decrease with each passing day. Due to the fact that the negotiations on the general regulations on the EU level of have not been definitely closed, these programs will be implemented with a significant delay.

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CHARACTERISTICS OF BOLOGNA PROCESS IMPLEMENTATION IN MONTENEGRO HIGHER EDUCATION SYSTEMS

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ABSTRACT
Socio-economic changes of Montenegro, as a young democracy, have introduced need for reform of educational system, specially higher education, to support and faster process of transition of its economic, political and social system. Highly educated young individuals are the most important factor for building one modern, democratic society, with strong EU integration aspiration, able to implement and develop European values as democracy, rule of low, respect to minorities. Bologna process was one of the basic frameworks for transformation and reform of higher education at the European continent. Accession of a new member country to the EU involves a complex process of its adjustment to the "rules of the game" for new member states. In that regard the Bologna process has offered perfect instrument for the essential reforms in higher educational system for all accession countries. For the Montenegro as a new country, skills and experiences acquired under the communist system became less marketable in the new market environment, compared to human capital acquired during the transition. For the higher educational system in Montenegro, Bologna reform of higher education towards more competitive and knowledge based economies, was the major reform path. All these have created urgent need for the high educational reform to enhance growth and increase the competitiveness. That's why Montenegro has introduced intensive high education reform package, signing of the Bologna Declaration in 2003. This paper will try to give answers to: Will Montenegro be able to compete in the knowledge economy and develop skills required for the twenty-first century? What are the major obstacles that higher education faces in Montenegro?

Keywords: Bologna process, Higher education, Quality, Reforms

1 INTRODUCTION

The harmonization of the European educational system was on of the results of integration, where effective European-level distribution of knowledge, mobility of labor, increasing the competitiveness of the European Union and the prosperity of European citizens were reasons for the development of the reform package today known as the Bologna process. The Bologna process has aimed the establishment of a competitive European higher education area and attracting students and instructors from outside. The intensive educational reform towards more educate and competitive European citizens, should proved strong support for the realization the Lisbon Strategy at 2000. The Lisbon strategy adopted 2000, aimed transition towards a knowledge economy, and by reaching the Lisbon objectives, the EU will become the most competitive and dynamic knowledge based economy of the world.

Accession of a new member country to the EU involves a complex process of its adjustment to the "rules of the game" for new member states. The EU integration process has influenced

and continues to influence the knowledge economy catching up process of new member states (Reinhile and Mrak, 2009). In that regard the Bologna process has offered perfect instrument for the essential reforms in higher educational system for all accession countries.

In the last decade, Montenegrin higher education system has been under intensive transformation. The Bologna process has been the major high education reform initiative (Lucin and Samardzija, 2012). For the Montenegro as a new country with strong EU aspirations, skills and experiences acquired under the communist system became less marketable in the new market environment, compared to human capital acquired during the transition. The expenditures on education were falling, what have had a significant effects on the quality of education, during the transition period (Campos and Dean, 2004). A recent comprehensive review of education systems in the region by (Luca et al., 2007) concludes that ex education systems focused on "memorized factual and procedural knowledge" have generated skills that are appropriate for planned economies but not necessarily for the demands of a new market economy.

All these have created urgent need for the high educational reform to enhance growth and increase the competitiveness. Things on which country can mostly have influence are increasing of competitiveness of people i.e. educated individuals, who have modern and applicable knowledge, creativity and innovation. That's why Montenegro has introduced intensive high education reform package, signing of the Bologna Declaration in 2003.

2   BOLOGNA DECLARATION AND BOLOGNA PROCESS

The basic higher education framework in EU is designed by the Bologna process. The process is a product of a series of meetings of Ministers in charge of higher education policy, with the goal to establish the European Higher Education Area by 2010. The basic precepts of the Bologna process date back to the Sorbonne Joint Declaration on Harmonization of the Architecture of the European Higher Education System, signed on 25 May 1998 by the education ministers of four countries: France, Germany, Italy and the United Kingdom (European Commission, 2010).

The Bologna Declaration on the European Higher Education Area, mostly based on the Sorbonne Declaration, was signed in June 1999 by ministers from 29 European countries. The Declaration became the basic document for the signatory countries in establishing the general framework for the modernization and reform of European higher education. This Bologna Declaration designed a set of actions to make European higher education more compatible and comparable, more competitive and more attractive for Europe's citizens and for students and scholars from other continents. The signatory countries were 5 EU Member States, three EFTA countries (Iceland, Norway and Switzerland) and 11 EU candidate countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia). In 2001, Croatia, Cyprus and Turkey were accepted as new members. In 2003 at the Berlin Conference, seven new signatory countries joined the Bologna Process: Albania, Andorra, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, the Holy See, Montenegro, Russia and Serbia. May 2005, the Bologna process was extended to Armenia, Azerbaijan, Georgia, Moldova and Ukraine. In 2007, country membership got the Republic of Montenegro as an independent State in the European Higher Education Area.

In the Bologna Declaration, ministers affirmed their intention to (European Commission, 2009):

- Adopt a system of easily readable and comparable degrees;
- Implement a system based essentially on two main cycles;
- Establish a system of credits (such as ECTS);
- Support the mobility of students, teachers, researchers and administrative staff;
- Promote European cooperation in quality assurance;
- Promote the European dimensions in higher education (in terms of curricular development and inter-institutional cooperation).

The Bologna process created a new sociopolitical area of higher education that brings together the European states, supra and international organizations, civil society and employers (Croshe, 2009). By the time the Bologna process has grown from 29 countries in 1999 to 47 today. The growing 'market share' of the EHEA in worldwide student mobility proves that European higher education has become more attractive since the Bologna Declaration.

Regarding increase of quality and better coherence, the main Bologna reforms concentrate on: the three-cycle degree structure (bachelor, master, doctorate), quality assurance in higher education, recognition of qualifications and periods of study, involving flexible, modernised curricula at all levels which correspond to the needs of the labour market. (IP/10/246) All countries have adopted two or three degree system, and are using European Credit Transfer and Accumulation System (ECTS) or some compatible systems. In the first cycle most countries have had combination of 180 ECTS and 240 ECTS. For the second degree the most common system is 120 ECTS. The combination 180+120 ECTS or model "3+2" is mostly popular within the countries. Usual length of doctoral studies is 3-4 years.

Bologna process has resulted in establishing the common instruments: European Credit Transfer and Accumulation System (ECTS), the Diploma Supplement (DS) and National qualification Frameworks (NQF). Almost all signatory countries fully implement first two instruments in their higher education systems, but still there are lagging in national qualification achievements.

In the first 10 years all countries have implemented most elements from reform architecture: involving legislation and national regulation. The states see the Bologna process more as an instrument to help them resolve their national problems, to make their universities attractive for the students of other continents, than as a way to harmonize their higher education (Charlier, 2006). The focus in the second decade of the Bologna Process should be the achievement of more strategic goals, what need further substantial efforts from governments, institutions, students and staff, merging with the strong commitment at national, regional and institutional levels.

The Europe 2020 strategy, put knowledge at the heart of the Union's efforts for achieving smart, sustainable and inclusive growth. This is because higher education and its links to research and innovation, plays a crucial role in individual and societal advancement and in providing the highly skilled human capital and the articulate citizens that Europe needs to create jobs, economic growth and prosperity (European Commission, 2011). The main areas for reform identified in the new agenda are:

- To increase the number of higher education graduates;

- To improve the quality and relevance of teaching and researcher training, to equip graduates with the knowledge and core transferable competences they need to succeed in high-skill occupations;
- To provide more opportunities for students to gain additional skills through study or training abroad, and to encourage cross-border co-operation to boost higher education performance;
- To strengthen the "knowledge triangle", linking education, research and business;
- To create effective governance and funding mechanisms in support of excellence.

The suggested reforms will produce several outcomes, by 2020. First, significant increase of young people successfully completing higher education, meaning that 40% of 30-34 year old citizens in the EU should have completed tertiary or equivalent education. Student higher education participation has increased in last decade significantly, but still it is insufficient to meet future projected growth in knowledge-intensive jobs[1]. With regard to reach this goal, Member states have to work very intensively to attract foreign students, broader society groups (disadvantages and vulnerable groups) and reduce higher education drop-out. Since EU is facing the constant shrinking students group for recruiting, as an impact of demographic ageing.

The second goal, reducing school drop-out rates below 10%, to meet this goal it is necessary to improve earlier educational outcomes that will affect to cumulate reduce school drop-out.

Third, increase research activities at the universities, with increasing research investments up to 3% of EU's GDP[2]. Hhowever, universities have lost their research monopolies. The balance between teaching and research are changing, leading to different 'portfolios' at different types of universities, e.g. the dominance of undergraduate teaching in some cases, and research – coupled with post-graduate training – in others (Havas, 2009). European economies have to become more research-intensive, based on higher education research, according to reach high levels of competitiveness, to be able to support industries of tomorrow.

The crucial aim of higher education is improving its quality and relevance in the time of fast and constant changes. Constant changes require adjustments in curricula, practical experiences in courses, exchange staff and students, flexible and innovative learning approaches and delivery methods. Employers and labor market institutions should be present in designing and delivery programmes, as well as life long process progammes. It is important to stress out that increase of Higher education quality depends on competence and motivation of teachers and researches, good requirement procedures, constant professional development, better recognition and working conditions, stimulation rewarding process will be the essential drivers towards increasing quality. To achieve these, it is necessary to have adequate higher education funding. The public investment is basic for sustainable higher education, but future increase of the education funds, means larger participation of private sources and more flexibility in governance (Tandberg, 2010).

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[1] By 2024, 35% of all jobs in the EU will require high-level qualifications, comparing with current situation where only 26% of the workforce has a higher education qualification.

[2] The EU lags behind in the share of researchers in the total labor force 6 per 100, comparing to competition countries: compared to 9 in the US and 11 in Japan.

3   THE NEED FOR HIGHER EDUCATION REFORM IN MONTENEGRO

Changes in European Higher Education Area and the Europe 2020, and Montenegro's commitment to European integration have created the need for reform of higher education. Montenegro is a small[3], middle income and relatively young country, got its independency in 2006. Candidate status was awarded to Montenegro at the end 2010, and negotiations for EU membership will begin in 2012. Moving closer to EU accession, Montenegro will need to increase significantly its competitiveness, and important mechanism for increasing competitiveness is improving the efficiency and quality of higher education and strengthening of the links between research, innovation, and business (World Bank, 2011). University education is recognized as a creator of both human capital and knowledge, and with Montenegro integration to EU it becomes imperative that its outputs are best quality, improving efficiency with high respect to the labor market and local/regional industry.

Changes in Montenegrin economic structure have occurred and new potential growth engines are tourism, service, energy sector and other knowledge-driven industries. The economic relevance of the heavy metal industries was important in early phases of Montenegro development mostly based on broader ex Yugoslav market. Nowadays, its importance has declined, owing to deteriorating competitiveness. Education system, particularly the tertiary level should be more sensitive to the economy's needs and supply with applied and competitive knowledge, having in mind needs of Small and Medium Enterprises as the important sources for future growth.

It becomes important to transform higher education and research into generators of economic growth in Montenegro, develop capacity to meet the EU Acquis requirements towards EU integration, and work towards the priorities expressed in the Europe 2020.

Montenegro is a small country in Europe, and education is the precondition of its further development, prestige and progress, particularly the higher education. In this context, universities may become the driving force of its development, or at least, to improve its competitiveness and prospects at both regional and global scene.

Higher education reform and reorganization of the University of Montenegro began by signing of the Bologna Declaration in 2003 but formal application started by adopting a new legal framework, which consisted of the Law on Higher Education (2003), and continued by adoption of the statute of universities and faculties (2004) and regulations for their implementation. This created a normative institutional framework of higher education in Montenegro[4],

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[3] Population estimate 623,000 citizens.

[4] Including The Law on Higher Education (Official Gazette of the Republic of Montenegro No. 60/03, 45/10, 47/11), Law on Education Inspection (Official Gazette of the Republic of Montenegro No. 80/04), Law on Recognition and Evaluation of Education Certificates and Equalization of Qualifications (Official Gazette of Montenegro, No. 57/11), Law on National Professional Qualifications (Official Gazette of Montenegro, No. 80/08 and14/09), Law on National Qualifications (Official Gazette of Montenegro, No. 80/10), Law on Recognition of Foreign Qualifications to Perform the Regulated Professions (Official Gazette of the Republic of Montenegro No. 18/11), The application of these laws is more precisely defined in the accompanying by-laws: The Strategy of Development and Financing of Higher Education 2011-2020, Regulation on Norms and Standards for Funding of Public Institutions of Higher Education and Funding of Higher Education Students (Official Gazette of the Republic of Montenegro No.33/11), Regulations on Description of Levels and Sub-levels, by-laws in accordance with the law on National Qualification Framework ("Official Gazette of Montenegro", No. 51/11), Admission Policy of the University of Montenegro 2012.

Challenges of the Modern World - Contemporary Economy and Globalization

Application of this institutional framework in Montenegro has led to an increase of both, higher education institutions and number of students. In the early stage of implementation of the Bologna process, University of Montenegro was the only institution of higher education in Montenegro. Changes introduced by the Law in 2003 brought more open and flexible system of the Higher Education, so that the greatest obstacles to its implementation were at the University of Montenegro, which still has had the strength and capacity to overcome internal resistance and their own conservatism, and thus facilitate the reform and necessary innovation (Academy, 2009).

The Law promoted the equality of public and private institutions of higher education and established the basic principles for the new organization of universities and study regime established in accordance with Expert Recommendations. Today, there are 3 universities in Montenegro, i.e. the University of Montenegro (UCG) - State University, (which consists of 20 faculties, three research institutes, and one independent study program, which are located in eight different towns throughout Montenegro), two private universities, Mediterranean University and the University of Donja Gorica and 7 independent private faculties. Number of students has increased significantly and amounted to approximately 25,000 students, out of which approximately 20,000 students are educated at the University of Montenegro, and about 5,000 in private institutions of higher education[5]. In terms of structure of enrolled students, the typical high interest of students for the humanistic groups of science - about 70% of enrolled students, while only 3% are enrolled in the art studies.

The new Law on Higher Education has provided the reform of higher education, primarily aiming to increase efficiency of studies and system harmonization with European trends in higher education based on the principles of the Bologna Declaration and Lisbon Convention. Obligations derived by joining the Bologna Process and Lisbon Convention were, primarily, aimed to achieving goals that are of primary importance for the promotion of European higher education system, such as (Ministry of Education and Sports, 2011):

- Adoption of the system based on three cycles of study. These are undergraduate, postgraduate and doctoral study;
- The introduction of ECTS (European Credit Transfer System) - as a measure of the scope of the study;
- Adoption of the system of easily understandable and comparable academic titles;
- Implementation of "diploma supplement" as a supporting document that describes the adopted program;
- The introduction of "joint degree" issued by two or more institutions;
- Promotion of European cooperation in quality assurance;
- Promotion of mobility of students and academic staff;
- Defining the process of recognition of qualifications and diplomas attained in accordance with the Lisbon Convention;
- Establishment of accrediting agency; • Introduction of quality assurance;
- Involving students as partners in the education process;
- Establishment of Universities as a single legal entity (requirement of Magna Carta Observatory)
- Establishment of opportunities for the realization of "lifelong learning" (LLL).

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[5] This is by 65% more students comparing to the school year 2005/6 with the share of self-financed students increasing from 53.3 percent to 79.7 percent.

Education activities at the institutions of higher education are realized through the academic and applied courses. Study programs are organized in three cycles as undergraduate, postgraduate and doctoral programs. Undergraduate academic studies last at least three and maximum four years (180 or 240 ECTS credits), and applied undergraduate studies last three years (180 ECTS credits). Postgraduate specialist studies last one year (60 ECTS credits). Postgraduate master studies (academic and applied) last one year (60 ECTS credits) following the specialist studies, and two years (120 ECTS credits) after the undergraduate studies. Doctoral studies last three years (180 ECTS credits) (Ministry of Education, 2011).

4   ASSESSMENT OF IMPLEMENTATION OF THE BOLOGNA PROCESS

Implementation of the Bologna process on Higher Education System (HES) of Montenegro has caused many changes and has had different effects on all actors involved in this process. Based on the current implementation, it can be said that the principles of the Bologna Process in Montenegro, in technical, normative and organizational sense have been adequately implemented. This is indicated by evaluations obtained at the Ministerial Conferences which measure the implementation of the Bologna Process among the signatory countries, where Montenegro has achieved the highest rating of 3.88 at the last Ministerial Conference held in Bucharest in 2012.

At the very beginning of this process, the application of these principles referred to state universities only, but private higher education institutions were established later and they have tried to meet the requirements of the market in the segments that could not be achieved by the University of Montenegro. What characterizes the higher education in Montenegro today is significantly more interest for further post-secondary higher education (52%), than is the case in the EU countries. Students who complete vocational schools, most frequently opt for further education, due to the inability of the labor market to absorb them. In this way, all higher education institutions are facing large demand for their services, especially in the field of humanities. Based on this, admission to most institutions of higher education is more massive than an individual or elitist.

Socio-economic changes and transition of Montenegro, as it was the case in most countries of the region, led to shut down of technological and metal complexes, and thus influenced the change in demand for higher education profiles. Modern, dominantly service-oriented economic development resulted in the dominant orientation of high school graduates to the humanities, (more than 80%) and very little demand for technical faculties, or science. Such changes in demand for HE services, mostly affected the University of Montenegro, which was established in 70's of the last century, when the need for technical faculties was expressed. This still represents a serious problem for the efficient functioning of the university. So far, the State University has shown very low flexibility to adapt the existing (especially technical) study programs to the newly incurred market needs, the needs of predominantly small and medium size enterprises. On the other hand, the faculties of humanities meet strong student interest, and because of this situation on the HE market, many private education institutions attempt to fill existing gaps. The presence of private institutions has given an offer for profiles that could not be offered most efficiently by the University of Montenegro, which introduced a desirable competition in the area of higher education in Montenegro, but the regulator has a lack of incentives to make the newly created environment that would foster quality higher education (Academy, 2009).

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One of the objections mentioned in academic work is that reform, unlike to other levels of education, was implemented without any previous strategy, action plan or other similar planning documents. Secondly, no special budgetary funds were allocated to this reform, but it is mostly financed by the University of Montenegro and foreign donations through appropriate projects (Academy, 2009).

In order to address the problems in higher education in the best way and increase the quality, the Ministry of Education and Sports in cooperation with the World Bank has developed the *Strategy for Development and Financing of Higher Education* (2011), the main component of which will be funded from a loan granted by this institution to the amount of 12 million EUR. Based on the analysis of higher education, and reports of re-accreditation of institutions and study programs, the following problems in higher education were systematized:

- Quality of education in Montenegro is very different;
- Rapid growth in number of institutions of higher education and number of students, without the existence of links between that growth and labor market needs;
- The system of financing of higher education does not track changes in the growth of higher education;
- Private investments (companies, funds and other legal and natural persons) are an integral part of higher education, with increasing participation in the financing of higher education;
- Cooperation among the institutions of higher education, which aims to raise the general level of education quality, is not satisfactory;
- The introduction and implementation of the Bologna process has not yet been analyzed;
- It is evident that there is a low number of citizens with higher education compared to developed countries;
- The concept of lifelong learning is still not sufficiently promoted and developed;
- There is no database of Montenegrin scientific diaspora and their involvement in the native country;
- The higher education system is neither competitive nor attractive at the international level;
- International cooperation and academic mobility is not satisfactory (no courses in English, insufficient infrastructural facilities: accommodation...);
- Scientific research is not sufficiently represented in the higher education process.

In order to implement the commitments of the Bologna Process, a number of institutions and stakeholders have been established in higher education of Montenegro. The most important actors in establishing of education policy in Montenegro are: the Council for Higher Education, Universities (state and private ones), Ministry of Education and Sports, Chamber of Commerce, Employers, Ministry of Science, Council for Science, students and NGOs. Reform in higher education has been accompanied by reform of governance, moving from state-governance model to the state supervision. Some elements of the new model have been introduced but not fully developed and clarified. Bologna process has introduced institutional reforms in Montenegro higher education system, in sense of establishment of all necessary stakeholders but still significant role and full influence eider of them haven't been develop yet, making the most important obstacle for successful implementation of Bologna Process.

5 INSTEAD OF CONCLUSION- OPTIONS FOR IMPROVING HIGHER EDUCATION IN MONTENEGRO

The issue of quality is certainly the central issue of the application of the Bologna process and will certainly occupy an important place in the coming years in Montenegro. Although we have no reliable criteria based on which we can currently measure the quality of higher education in Montenegro, the most important stakeholders in the high education process indicate that one of the biggest problems of this process is the question of quality. The evaluations of labor market and international partners (World Bank and European Commission), are becoming louder indicating that the increase in quality of higher education is the basis for the growth of competitiveness of Montenegro and its survival at large common EU market.

Again, it should point out that the current implementation of the Bologna process in Montenegro was mostly referred to building of institutional and administrative preconditions for its implementation. Up to date, the Bologna process has brought many positive changes, such as: duration of study is significantly reduced, the organization of education process is better designed than it was the case in "old" system - students must regularly carry out their duties, if they wish to complete their studies on time, and the possibility of acquiring an internationally recognized diploma was created as well. Also, the reform of the education system delivers multiple benefits to researchers, through the mobility of researchers and the possibility of involvement of our scientists in the European Research Area.

What will characterize the next period of implementation of the Bologna process is the orientation of all interested stakeholders on fundamental and essential changes in the higher education that will have an effect on increasing the quality. The largest number of complaints is related to the large number of institutions that were established in the short term, which number is perhaps too high for the size of Montenegro, offering a different quality of education. Reducing the number of programs, with clearly defining the criteria for closure, through their matching to the needs of labor market and strategic development orientation of Montenegro is one of the directions of the reforms to be implemented in order to increase quality.

Increasing the quality of higher education today necessarily requires *innovation of the curricula*, in order to define learning outcomes and acquisition of knowledge adapted to the needs of the labor market, in order to ensure greater employability of our students after graduating. Increasing quality means *improving existing academic staff*, predominantly through increased mobility of teaching and non - teaching staff, as encouragement to the young staff that works at the higher education institutions to continue their education i.e. to prepare their master and doctoral thesis at the European universities. Since the quality of human capital is crucial in increasing the quality of higher education, the project of the World Bank, within the Component 2[6] provides EUR 2.1 million for these purposes. Also, the improvement of teaching staff can be achieved by building closer links with the scientific diaspora, who would be interested in participating in teaching or research projects on part time or full time basis.

Increasing the mobility of academic staff is of great importance; however, mobility of academic staff is still very low. Improving this practice requires a greater stimulus towards the mobility of academic staff, where staying abroad would be further evaluated. In addition to

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[6] World Bank, Higher Education And Research For Innovation And Competitiveness Project, 2011.

mobility, it is important to adjust the criteria for selection of academic and scientific titles to changed needs, structure and functioning of the University. Having involved in European projects, academic staff are also offered numerous training opportunities, study visits, research work with European colleagues.

In next decade of Bologna process implementation our higher educational institutions have to work with EU partners to further develop decentralization culture and practice, exchange experience with region and international community in other to strongly increase quality of higher education.

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FINANCING THE EFFECTS OF CATASTROPHIC EVENTS IN LOCAL GOVERNMENT UNITS - THE SEARCH FOR THE OPTIMAL SOLUTION

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ABSTRACT
In this study, authors systematize the use of the term "disaster" in relation to the functioning of local government units (LGUs), based both on literature and studies conducted in the Polish local government. Local government entities do not take effective action in the risk management process relating to catastrophic risks, even in the narrow sense referring only to the effects of nature. Realization of catastrophic events results losses primarily economic, social and environmental. To further the proper functioning of local communities seem necessary systemic solutions to the financing of the effects of the implementation of a catastrophic event that would allow continued unimpaired functioning of the local community.Based on our preliminary survey and analysis of available data (Ministry of Finance, Ministry of Interior) identified sources of funding for the impacts of a natural catastrophe (mainly flooding). The results of these studies clearly indicate that a large inconsistency and arbitrariness in deciding whether the same local government and state authorities. The paper attempts to identify the various proposals for systemic solutions that would ensure that the local government losses due to natural disasters. Work in this area seem to be all the more necessary that the insurance market is increasingly refuses to cover this risk.

Keywords: Financing of natural disasters in local government, Impact of flooding to local governments, Natural disasters

1   INTRODUCTION

A local self-government is defined as a model of democratic local authority, which ensures universal participation of urban and rural inhabitants in the exercise of public authority in a country (Ginsbert-Gebert, 1992, p. 1). According to the European Charter of Local Self-Government, a local self-government denotes the right and the capacity of local authorities, within the limits of the law, to regulate and manage a substantial share of public affairs under their own responsibility and in the interest of the local population[1].

For many years Poland has been a country with a tradition of local self-government. Local government ensures the participation of social representatives in the execution of public administration. The beginnings of local self-governance date back to April 1791. Decentralization of the power in Poland differed substantially in different periods of the history, however, in 1950 local government, and in particular its subjectivity, was abolished completely. Changes in the Polish political system in 1990 also resulted in changes in relation

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[1] European Charter of the Local Self-Government Art. 3 sect. 1

to territorial system. Although communits (gminas) had already existed since 1973, the Act of 8 March 1990 on Territorial Self-Governance gave it a completely new legal status and a new position in the structure. Gminas acquired legal personality and as a consequence the right to their own property and revenues as also to independent decisions on their allocation[2]. At the same time, the responsibility for the performance of tasks, including property management, were transferred to gminas. As of Jan 1st 1999 a new, three-level territorial division of the state was introduced in Poland. Within this model, a commune (gmina) is at the basic level, a district (poviat) is at the intermediate level and a province (voivodeship) is the highest one. In 1999 16 voivodeships, 308 land poviats, 65 city poviats, and 2489 gminas (Regulski, 2012, pp. 4–15) were established. Additionally, in 2002 seven new poviats were set up. All the above constitute a specific socio-economic system which consists of (Jastrzebska, 1997, p. 7):

- inhabited area,
- authority i.e. democratically elected bodies,
- organisational entities of a gmina, poviat and vivodeship.

The purpose of the reform creators was to really enable local communities to deal with tasks concerning them. It was thus assumed that the relations between the state and self-government would be based on the principle of subsidiarity. According to this principle, central public authority bodies should only carry out such tasks which cannot be properly performed by local and regional self-government communities or individual entities. Consequently, as long as it is possible, local self-governments should carry out particular tasks which have a public character (Piotrowska-Marczak, 1998, p. 37). Distribution of tasks between various levels of authority and administration depends on (Borodo, 1997, pp. 11–16):

- constraints on decentralisation indicated by principles of economy and thrift,
- possibility of establishing a local (regional) market within the range of meeting communal needs,
- founding the operations on local (regional) manufacturing resources.

According to legal regulations, it is possible to distinguish several spheres of autonomy of local self-government entities (LSGE) (Jastrzebska, 1999, pp. 17–18):

- its own property and property rights,
- establishing laws on the area of a LSGE,
- legal entity,
- judicial protection of independence,
- the right to undertake operations,
- allocating a source of income,
- formal and factual separation of local budgets from the state budget,
- the right to manage its own affairs,
- limited scope of surveillance of a *gmina, poviat* and *voivodeship* operations,
- establishing self-government administration with the purpose of achieving the entities' objectives.

One of the most significant threats to the functioning of a self-government are disastrous events, including natural disasters. Among many self-government activities, next to satisfying social needs, there is also protecting the property, which is often the key element influencing the standard of living of gminas' inhabitants. Catastrophic risks oblige self-government units to take preventive (reduction of the probability of particular event occurrence) and repressive

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[2] These rights were subsequently guaranteed to gminas by the Constitution.

actions (saving the property affected by a disaster). Nevertheless, the costs borne in respect of repairing the damaged infrastructure elements are essential. This article aims at indicating system solutions that could replace the prevailing action-based and discretionary manner of financing the consequences of catastrophic events to the self-governments' property. In order to do so, we have defined the notion of catastrophic events, including flood which is the most severe natural disaster threatening Poland. The next stage includes the analysis of the scope of losses incurred due to floods and the methods of their financing on the example of two, by far, biggest floods in Poland (1997 and 2010). Moreover, proposals of system solutions based on mutual insurances, possible to be implemented by local self-government units have also been indicated.

2 CATASTROPHIC RISKS – DEFINITION, COMMON TYPES OF CATASTROPHIC THREATS IN POLAND

The word catastrophe is derived from the Greek word (καταστροφή), which means a decisive, ultimate event. According to "Encyclopædia Britannica" catastrophe is a sudden and unexpected event causing adverse effects such as human and material losses. Specific types of catastrophe are cataclysms or natural disasters, seen as extreme natural phenomena that result in significant losses on the territory where they occur (including those that pose a threat to human life), often changing the image of the earth surface as also causing high losses in the economy and capable to alternate the environment. In accordance with the safety provisions of the National Crisis Management Plan, there are 18 types of threats identified in Poland (KPZK, 2012, pp. 35–37). The predominant ones are: flood, landslide, frost, hurricane, fire, drought and others threats. Over the past twenty years floods have generated the greatest value losses. Fires come as second and the third are industrial accidents (Table 1). However, the number of floods is almost one hundred times bigger than the number of fires.

Table 1: Estimated value of losses caused by crisis situations in the period of 1990 – 2010 (Łyskawa 2012)

Event	Losses (PLN)
Flood	23 430 110 302
Fire	21 000 000
Industrial accident	7 000 000
Epidemics	19 000 000
Transport disaster	3 350 000
Drought	98 829 600
Gales and hurricanes	176 148 646
TOTAL	23 755 438 548

Floods are natural disasters characterised by the most adverse effects not only in Poland. On the basis of the data collected during the years 1995-2004, it is estimated that 20% of victims of all natural disasters from that period are flood victims. Moreover, floods cause 30% of economic losses borne as a result of all elemental disasters (Majewski, 2004, p. 10).

Flood is a random phenomenon, one of the extreme natural phenomena. The Directive on the assessment and management of flood risks defines flood as "the temporary covering by water of land not normally covered by water. This shall include floods from rivers, mountain torrents, Mediterranean ephemeral water courses, and floods from the sea in coastal areas, and may exclude floods from sewerage systems" (2007/60/EC). The concept of flood risk is also

associated with flood. The Directive on the assessment and management of flood risks defines flood risk as "the combination of the probability of a flood event and of the potential adverse consequences for human health, the environment, cultural heritage and economic activity associated with a flood event" (2007/60/EC).

Management of catastrophic risk, and in particular flood risk has been described in a number of European Union documents, beginning with the community action programme in the field of civil protection, and ending with the Council Directive on critical infrastructures or the Directive on the assessment and management of flood risks.

3   FINANCIAL CONSEQUENCES OF FLOODS IN POLAND

Flood means not only a threat but also damages and economic, social and environmental losses. Official statistics from the Polish Central Statistical Office (GUS) indicate an increasing average value of flood losses in Poland (Chart 1). The period between 1991-1998 including the 1997 Central European flood is an exception. After excluding the event from that period, the average annual value of losses drops to PLN 1.474 billion.
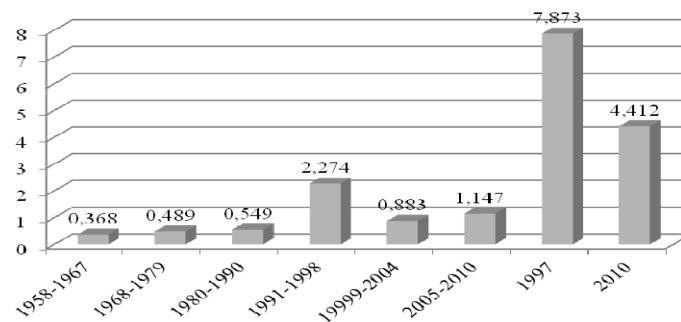
Chart 1: The average annual flood losses in Poland (PLN billion) (Own work based on the Polish Central Statistical Office data)

It should be noticed that this data is based on the records from the Ministry of Internal Affairs and Administration. The real estimates of losses are significantly higher. In 1997 the flood loss estimation reached PLN 12-12.2 billion, while in the 2010 flood it reached app. PLN 14 billion. Although the losses caused by the floods in 1997 and in 2010 are practically the same, according to the records of the Ministry of Internal Affairs and Administration the difference between them is almost double. It is the result of higher losses borne by individuals in 2010 (Chart 2).
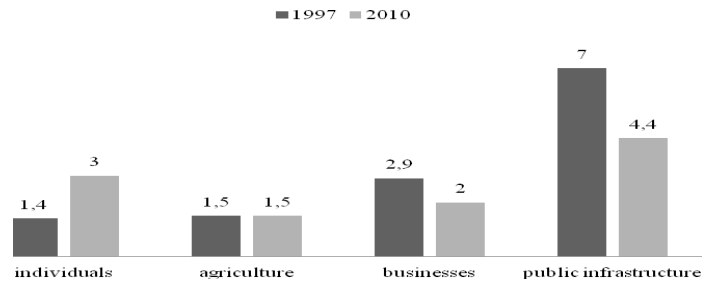
Chart 2: Losses due to floods in 1997 and 2010 according to the entities bearing the loss (PLN billion) [3] (Wieteska-Rosiak, 2011, p. 160)

The losses in the LSGE infrastructure in 2010 include many elements indispensable to proper functioning of local communities, such as roads and bridges or schools and nursery schools (Table 2).

Table 2: Infrastructural renovation needs due to the 2010 flood; in numbers (own work based on the Ministry of Internal Affairs and Administration data)

Type of flood loss in 2010	Number
Number of victims (evacuated)	266 000 (30 000)
Length of damaged roads in gminas, poviats and voivoideships	80 000 km
Length of national roads requiring repair	1 160 km
Length of flood barriers requiring modernization or total reconstruction	1 300 km
Number of bridges requiring renovation	59
Number of landslides to be removed	111
Number of schools affected by the flood	800
Number of nursery schools affected by the flood	160

According to the Government Centre for Security, the pattern of flood threat occurrence is not regular – the voivoideships that are most threatened by the occurrence of flood are: małopolskie, podkarpackie, śląskie, dolnośląskie and opolskie. Floods constitute a threat for territories and infrastructure in 1039 gminas, including inter alia 86 500 residential buildings, 2600 public utility buildings, app. 2 thousand bridges and 280 sewage treatment plants. The official data from the Polish Central Statistical Office almost exclusively concerns the losses to the property of LSGE (Chart 3). Almost 100% of the losses registered in 2010 are the self-government losses[4].

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[3] The total value of losses for the year 1997 is almost consistent with the Polish Central Statistical Office estimation and it amounts to 12.8 billion; in 2010 the total value of losses presented in the chart amounts to 10.9 billion – app. 3 billions of losses are not included in the Polish Central Statistical Office estimations.

[4] As mentioned before, the Polish Central Statistical Official (GUS) in its official statistics noted exclusively the data from the records of the Ministry of Internal Affairs and Administration. This statistics barely includes losses other than self-government losses.

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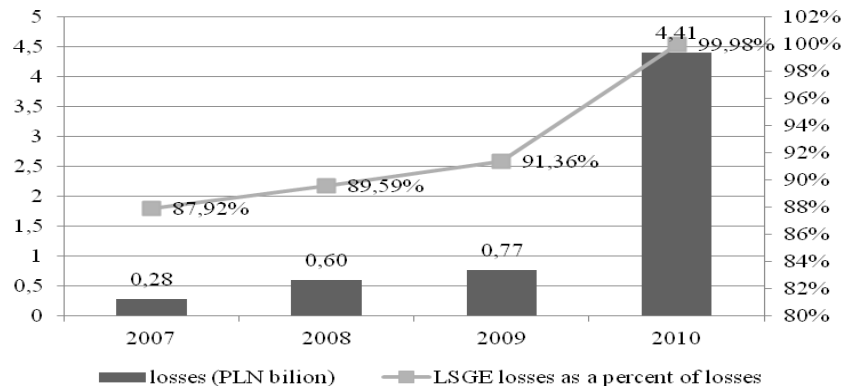
Chart 3: Losses in the self-government infrastructure (Own work based on Polish Central Statistical Office data)

According to the data collected by the Supreme Chamber of Control (NIK), in 1997 the estimated loss of the commune property amounted to PLN 3085.4 million [NIK, 2000]. In the records of the Ministry of Internal Affairs and Administration it is noted that in the 2010 flood the self-government property losses were 1 billion higher – 4411 million and it constituted over 30% of all estimated losses.

4   FINANCING FLOOD EFFECTS IN LOCAL SELF-GOVERNMENT UNITS
So far, no comprehensive solution that would enable financing the effects of a catastrophic event has been developed in Poland. In case of small-scale events the financing is based predominantly on own resources (private or public) as well as on compensations in respect of property insurances. Financing the effects of large-scale and big range catastrophic events looks slightly different. This situation concerns not only the losses borne by individuals but also by public entities, including territorial self-governments.

The analysis of financing of the 1997 flood has shown that the losses in the area of the dolnośląskie voivoideship constituted app. 70 % of all losses in the municipal property in Poland. The funds collected to cover the losses were enough to satisfy only app. 14% of the financial needs.

The main source of financing the flood losses in the municipal property was the national budget (50.9%), followed by national special purpose funds and government agencies loans and subsidies (14.2%) and the support of the EU (14%). 67.8% of the funds came from the national public sources.

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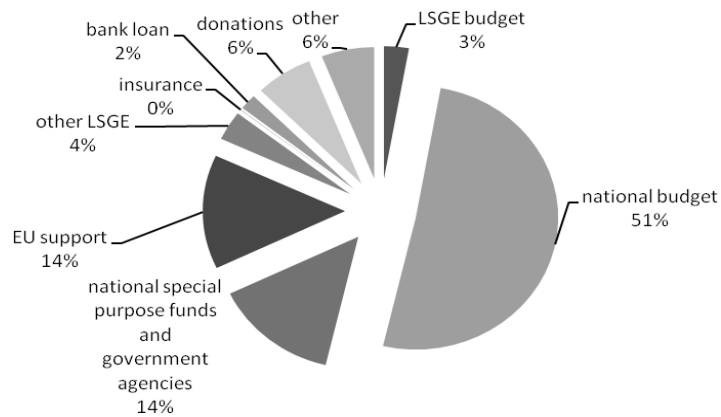
Chart 4: Breakdown of the sources used to cover the losses in 1997 (%) (Own work based on Supreme Chamber of Control data)

The significance of the compensations from property insurances was minimal (0.1%). In comparison, almost 10% of the total loss (private and public) borne as a result of the flood in 1997, was financed by insurance companies. Therefore, most insurance compensations concerned the private sector.

A part of the gminas' budget associated with eliminating the consequences of natural disasters showed a deficit of PLN – 402.5 million (Table 3).

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Table 3: Revenues and expenses of self-government units in respect of elimination of the consequences of natural disasters in 2010 (PLN million) (Own work based on Polish Central Statistical Office data)

Revenues in respect of eliminating the consequences of natural disasters, including	**2309.0**
direct loss settlement	185.4
social welfare	746.7
Expenses in respect of eliminating the consequences of natural disasters	**2711.5**

The gminas' revenues in over 86% came from public funds (Table 4). Government subsidies covered benefits for the flood victims and the ongoing flood-control action. The subsidies for property renovations constituted only app. 17% of the damaged property value. In the years 2010-2011 the State spent PLN 3.33 billion on eliminating the consequences of natural disasters, including app. PLN 1.66 billion for damaged property renovation which was app. 40% of all property losses caused by the flood. Since the size of the flood losses in 2010 was higher than 1% of GDP, it was possible to solicit support from the EU. The European Parliament and the Council of the European Union allowed the mobilisation of the resources from the EU Structural Fund in 2011 in order to reconstruct the self-government infrastructure.

Table 4: The EU and government support for self-government units affected by the flood in 2010 (PLN million) (own work based on Ministry of Internal Affairs and Administration data)

Financing purpose	2010	2010-2011
Direct loss settlement	201.00	201.00
Benefits for the flood victims	750.00	923.00
Subsidies for self-government property renovation	686.00	1 659.80
Flood-control programme (for self-government)	367.40	554.00
Other support		299.54
Total government support	**2 004.40**	**3 337.80**
Including resources from the EU and the 3*200 Programme		**3 770.35**

Regrettably, in case of the year 2010 there is no data on the compensations from insurance companies that were received by self-government units. However, it is worth mentioning that the level of financing of all losses caused by the 2010 flood, based on insurance compensations, was raised from 10% in 1997 to over 12% in 2010.

The main sources of funds used for eliminating the consequences of natural disasters are: government support, support from other public financial sector entities as also the EU support. The scale of financing allows to reconstruct only some elements of the self-government units' property – in the year of the flood it was merely a dozen or so per cent. Such situation, therefore, made it impossible for local communities to function properly.

5   THE NEW SOLUTION OF FINANCING THE CONSEQUENCES OF NATURAL DISASTERS IN LOCAL SELF-GOVERNMENT PROPERTY

When it comes to financing catastrophic events we can identify two main mechanism types – self financing and transfer of financial risk. The former is the ex ante financing, which means financing via a catastrophic fund consisting in the budget surplus transferred to the fund by

entities or conditional credit contracts which guarantee that the bank is ready to mobilise the resources in case of a catastrophic event. The latter is the ex post type that is associated with taxes imposed as a result of a catastrophe, mobilisation of budgetary reserves, credits etc. The transfer of financial consequences of risk occurrence can be conducted by the implementation of insurance or non insurance solutions. For non insurance solutions the transfer of the consequences of natural disasters (including floods) for self-government units could be aimed at financial markets and conducted via, for example, risk securitisation – catastrophe bonds (transregional and transnational).

Insurance methods (i.e. transfer to the insurer) could be based on an obligation to insure the self-government property, create insurance pool or to appoint a mutual insurance company. Such a mutual company could function as a big public or regional mutual insurance companies, that could aim at establishing an association. In the case of mutuality, however, the State should play an essential part as the reinsurer of 'last resort' – by intervening only when the losses are too high to be covered by way of normal insurance activity. This would not involve public resources in financing any commercial activity but would significantly guarantee solvency of such an insurance company.

5.1   Insurance mutuality in financing the consequences of catastrophic events
The process of insurance mutuality is generally realized by insurance companies called mutual insurance associations. Mutual insurer's members mutually protect themselves from adverse effects of random events. Such a solution has both, advantages and disadvantages (Table 5)

Table 5: Disadvantages and advantages of a catastrophic mutual insurance company

Advantages	Disadvantages
• awareness of an 'own' insurance company (advantage for regional solutions) • lower cost of insurance • autonomy in surplus management • insurance coverage for a risk that the market does not want or which has inadequate market price • insurance budget stabilisation (independence from price volatility and insurance coverage availability), • risk management centre • direct access to the reinsurance market (direct negotiations, lower reinsurance cost, higher flexibility of the reinsurance programme) • no need to organise tenders for insurance contracts concluded with a TUW by entities being a TUW member. • aiming at including other insurances • influence on increasing competitiveness on the insurance market (reduction prices on the market) • lower capital and solvency requirements	• in case of the regional solutions necessity to additional risk spread, • limited ability to control claims and influencing its reduction, • tendency to an ex gratia compensation • lack of knowledge about the concept of mutuality in self-government, • short-term insurance policy (risk management) in self-government units or its lack, • high cost and relatively complicated procedure of an entity's organisation, • necessity to accumulate initial capitals, • lack of the state/European Commission's insurance policy for the support of the TUW activity, • necessity to accept legal solutions (especially in the scope of a government acting as a reinsurer of "last resort") by government/politicians/EU, • a new system of solvency assessment of insurance companies (Solvency II) and in the future, forcing the concentration of small TUWs, making their activity similar to that of a joint stock company or even converting them into traditional joint stock companies.

The main strength of the solution based on insurance mutuality would be the awareness of an "own" insurance company. Here we should point at the advantage of regional solutions over

an entity in the form of a large, public insurance company, which could be perceived at the local level as an "outside" company.

The form of a mutual insurer essentially allows to lower the cost of insurance (which can be reduced by eliminating the total acquisition costs), also thanks to the freedom of disposal of any surplus. Unfortunately, in the case of a catastrophe risk (especially the natural disaster) there is a de facto lack of ability to control the claims and the impact on its reduction. Mutual insurer, however, allows for insurance coverage of the risk that is "not wanted" by the market or for which the price is inadequate, which can be more often observed in the market for the risk of flooding. Mutuality would allow self-government units to stabilize the insurance budget by getting isolated from price fluctuation and making the coverage available in the insurance market, and, what seems to be very important, such a company could become a risk management centre. In the case of self-government units, according to the research, the risk management process is not functioning effectively. An own insurance company would have direct access to the reinsurance market. Direct negotiations would result in lower reinsurance cost and greater flexibility of reinsurance program.

The mutual insurance solution, especially as far as regional companies are concerned, would require additional risk spreading – when catastrophe risk occurs in the region, the regional TUW, despite the reinsurance program, may not be able to pay the compensation or the liability of the State as the reinsurer of last resort could be very high. Additional spreading may be provided through mandatory exchange of risk between mutuals.

Major constraints for the development of this solution is the lack of knowledge of the idea of mutuality at self-government and central levels. Also, quite a high cost and relatively complicated procedure of the entity's organization as also lack of specialized self-government staff are the possible disadvantage.

Lack of an insurance policy of the State and the European Commission to support the activities of mutual insurance is a threat to this concept. A new system for solvency assessment of insurance companies (Solvency II) is the possible future forcing the concentration of small TUWs, making their activity similar to that of a joint stock company or even their commercialization.

In case of creating a mutual insurance company for local, self-government communities, it is also worth to indicate an extremely high social value of this form of insurance activity.

6   CONCLUSION

The scale of budgetary one-off engagement of funds and the discretionary power of this solution prevents normal reconstruction of gminas property potential, and thus prevents appropriate implementation of tasks by territorial self-governments. It is impossible to meet the social needs or raise the standard of living of the inhabitants when rapid and complex loss recovery in the infrastructure is not provided. Such a situation necessitates a search for a system solution that would guarantee compensations to self-government units in case of natural disasters on both supra-regional and local scale. Such a solution could be the result of activities of self-government units themselves, which could, on their own initiative, supported by the activities of the State, create a system based on insurance mutuality. Lack of awareness and lack of insurance policies at both local and state level constitute threats to the proposed system solution.

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DEVELOPMENT OF SIBERIA AND THE REGION INNOVATION PROFILE

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ABSTRACT

The paper demonstrates methodological aspects of the innovative development diagnostics of a region. These aspects are illustrated by the results of the factor and cluster analyses of the innovative development indicators that assist in the identification of the innovation profile of the Siberian Federal District and the Russian Federation regions. Differences in the sets of factors and indicators that statistically explain the innovative development in Russia and Siberia in different years are demonstrated. Regions of the Siberian Federal District with similar profiles are identified.

Keywords: *Cluster analysis, Factor analysis, Innovation status, Innovation strategy, R&D, Region, Region innovation profile*

1 INTRODUCTION

In the present time regional innovation policy is widely discussed by both researchers and policy makers. Innovations, regional innovation policy, and regional innovation systems were studied by many Russian economists such as I. Dezhina, L. Gokhberg, V. Ivanov, D. Lvov, S. Kazantsev B. Kleiner, N. Kravchenko, B. Lavrovskiy, V. Makarov, P. Minaker, E. Monastirniy, A. Novoselov, G. Untura, M. Yagolnitser, etc. Moreover, recently several official documents and legislative acts that set priorities of the regional policy for the near future have been approved. Examples include: "The Innovation Strategy of Tomsk Oblast" (2003), Law No. 15/2011-OZ "On the Innovation Policy of the Public Authorities of Moscow Oblast" (2009) and "The Innovation Strategy of Krasnoyarsk Krai Until 2020" (2011). To study the innovation dynamics and the scale of innovation activities different methodology is used, including qualimetrics (Kazantsev, 2012) and statistical methods (the factor (Bogachev, Briskin, 2010; Markov, 2010), regression (Suslov et al., 2012) and cluster analyses (Markov and Yagolnitser, 2006; Untura et al., 1998).

Numerous publications of the Institute of Economics and Industrial Engineering of the Siberian Branch of the Russian Academy of Sciences (IEIE SB RAS) demonstrate that the development of Siberia as a resource region does not exclude the active use of innovations in the resource sector as well as the creation of the high tech manufacture. However, innovation profiles of the Siberian regions are very different from each other. This fact should be taken into account when developing strategies for this macro region (Untura, 2012).

The goal of the paper is to analyze scientific and innovative activity indicators of the Siberian Federal District regions using methods of factor and cluster analyses; diagnose the innovative

development of Siberia and compare it to the analogous results for the Russian Federation. The diagnostics[1] of the innovation profile based on the cluster analysis will likely allow taking into account the specific features of regions in the public policy initiatives.

2 EXPERIENCE OF THE STATISTICAL METHODS APPLICATION TO THE EVALUATION OF THE INNOVATION DEVELOPMENT LEVEL

In European literature the experience of the use of factor analysis to study the innovation dynamics of firms, industries and territories is reflected in the works of Radosevic (2011), Kleinknecht, Monfort and Brouwer (2000), Matinez-Pellitero et al. (2008), Srholec and Verstpagen (2008), and also Žížalová (2009). We should note that Scholec and Verstpagen and Žížalová apply a two-stage factor analysis in their research. The direction of the research illustrates an interesting trend: the majority of research is conducted on the micro-level and only a few papers study the innovation policy of territories.

In Russian literature the factor analysis has been applied to the solution of the following tasks: the analysis of the innovation activity in the oil and gas sector (Markov, 2010), of the federal goal-oriented programs (Bogachev and Briskin, 2010), and of the high-tech clusters in Novosibirsk (Markov and Yagolnitser, 2006). These works partly fill the gap in the regional diagnostics of the innovation activity.

However, to our view, it is necessary to develop, adapt and test common statistical methods to fully analyze and *diagnose* the state of the innovative activity of regions in order to develop the targeted regional policy. To do so, it is necessary to unmask indicators that make the highest contribution into the innovative activity of territories by using statistical tools. One of the methods applied in our paper is the principal component analysis that includes factor and hierarchical cluster analysis. Therefore, the importance of the work lies in the possibility to identify the priorities of the innovative activity of the Siberian regions using the comparative statistical tools in Statistical Package for Social Science (SPSS).

3 EMPIRICAL BASE AND RESEARCH RESULTS

For each region we use twelve indicators available from Federal statistics reports of ROSSTAT (Rosstat, 2012). All indicators are grouped according to the LOGFRAME methodology of the World Bank. Logframe groups all indicators into four categories C1 – input, C2 –output, C3 –outcome, C4-impact, where input is the expenditure of resources that results in some output. The outcome of the policy is an application of the output and the macroeconomic impact is the application of the outcome to the one of the spheres of the people's welfare (Kaneva, 2011; Logical Framework Methodology, 2012). Table 1 presents the indicators, their values for Russia and Siberia and the breakdown into classes according to the LOGFRAME methodology.

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[1] Here and further on we will define diagnostics as "a recognition of a particular object or of a system via a timely registration of their considerable parameters and the following attribution to a particular diagnostic category in order to forecast their behavior and to make a decision to influence the behavior in the desired direction" (Untura, 1998).

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Table 1: Indicators of the innovative activity for Siberian Federal District and Russia in 2007 and 2010

Indicator	Designation	LOGFRAME	Russia 2007	Siberia 2007	Russia 2010	Siberia 2010
Number of R&D organizations	X_1	*C1*	*3957*	*464*	*3492*	*404*
Number of people in R&D	X_2	*C1*	*801135*	*56427*	*736540*	*53024*
Number of PhD students	X_3	*C1*	*147719*	*17454*	*157437*	*18727*
Number of leading technologies created	X_4	*C3*	*1364*	*61*	*529*	*64*
Number of technologies used	X_5	*C2*	*180324*	*11848*	*184434*	*16339*
Share of organizations carrying out R&D in the total number of organizations, %	X_6	*C1*	*9,2*	*8,1*	*9,3*	*8,2*
Expenses on technological innovations, mln RUR	X_7	*C1*	*234057,6*	*19870*	*349763,3*	*48626,7*
Volume of innovative products and services, mln RUR	X_8	*C3*	*916131,6*	*51257,6*	*1165747,6*	*46888,9*
Volume of innovative products and services of firms that realize technological innovations, mln RUR	X_9	*C3*	*880392,2*	*48169,9*	*1007344*	*37728*
Number of patent applications	X_{10}	*C1*	*39439*	*2591*	*42500*	*2414*

Number of patents issued	X_{11}	*C2*	*94172*	*1782*	*21027*	*2090*
Internal expenses on R&D, mln RUR	X_{12}	*C1*	*371080,3*	*23846,7*	*523377,2*	*33870*

First, using the factor analysis the authors plan to reduce the number of variables and group variables into factors that best describe innovation processes currently taking place in Siberia. Second, the factors will be used to construct regressions to find statistically significant relationships between the variables that constitute factors. Third, the hierarchical cluster analysis will be applied to group regions into clusters with similar innovation profiles. The results are displayed in the dendrograms 1-4.

We applied this methodology to the data from 2007 and 2010 time periods. These years match the ends of the first and the second stages of the Government Development Strategy Until the Year 2020 (Project of the Government Strategy, 2011). The first stage covers years 2006 and 2007, and the second stage covers the period from 2008 to 2010. The results for both periods for Siberia are compared to the analogous results for the Russian Federation.

3.1 Factor analysis of the indicators of the innovation activity of the Siberian regions

3.1.1 Factor analysis of the indicators of the innovation activity of the Siberian regions in 2007 and 2010

The results of factor analysis of the innovation dynamics of the Siberian regions in 2007 are presented in Table 2. Table 2 lists the factor loadings and the rotated components matrix[2].

Table 2: Factor loadings and the rotated component matrix, Siberia, 2007, 10 variables

Variable	Components	
	Factor 1	Factor 2
X_1	**0,963**	**0,208**
X_2	**0,979**	**−0,045**
X_3	**0,928**	**0,203**
X_4	0,755	0,381
X_7	0,567	0,696
X_8	*0,119*	*0,984*
X_9	*0,124*	*0,983*
X_{10}	0,898	0,389
X_{11}	0,898	0,381
X_{12}	**0,980**	**0,118**

We will now analyze factors 1 and 2 from with respect to the variables that constitute the factors. Maximum factor loadings for the factor 1 correspond to the variables X_1, X_2, X_3 and X_{12} (marked in bold text in the table 2). This factor can be characterized as «investments in

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[2] The procedure of variable space reduction does not have strict rules and is partly subjunctive. Researchers are advised to select variable that have correlations with the extracted factors that are over 0,8 that are also weakly correlated with other factors.

R&D and the human capital». Factor 2 is based on the two variables (marked in italics in the table 3) - X_8- volume of innovation products and services in mln RUR and X_9- volume of innovation products and services of firms that carry out technological innovations. These two variables have factor loadings of 0,984 and 0,983 respectively. This factor can be called «volume of innovation production».

The analysis carried out for 2010 showed that all communalities were greater than 0,8 and none of the variables were excluded from the analysis. Three factors explaining 92% of the total variance were extracted. Factor 1 is a complex factor and consists of the four variables X_1, X_2, X_4 and X_{12}. Some of the variables included are input variables (organizations, personal, expenses on R&D) and some are outcome variables. Generally speaking we can label this factor «effectiveness of the investments in R&D and the human capital» or «the innovation productivity». Factor 2 is based on the variable X_7- expenses on technological innovation, mln RUR. Factor 3 is also based on a single variable. This variable is X_6 - share of organizations that carry out research and development in the total number of organizations (%). We will call this factor «share of innovative organizations».

3.1.2 Comparative analysis of the innovation profile of the Siberian regions in 2007 and 2010

The year 2007 coincides with the end of the first stage of the innovative development of Russia according to the Government Development Strategy of the Russian Federation Until the Year 2020. Table 3 enables us to see how innovation profiles of the Siberian regions change from 2007 to 2010.

Table 3: Factors explaining the innovative development of Siberia in 2007 and 2010

2007		2010	
Factor	**Variables**	**Factor**	**Variables**
Factor 1. Investments in R&D and human capital	X_1 – number of organization carrying out R&D; X_2 – personnel in R&D; X_3 – number of PhD students; X_{12} – internal expenses on R&D	Factor 1. Investments in R&D and human capital	X_1 – number of organization carrying out R&D; X_2 – personnel in R&D; X_4 – number of critical technologies created; X_{12} – – internal expenses on R&D
Factor 2. Volume of innovative products	X_8 – volume of innovative products and services; X_9 – volume of innovative products and services of the organizations that realize technological innovations	Factor 2. Expenses on technological innovations	X_7 – expenses on technological innovations
		Factor 3. Share of innovative organizations	X_6 – share of organizations carrying our R&D

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At the next stage of our research we construct linear regressions based on the variables that constitute the factors. For instance, the regression based on the second factor will take the following form [3]: $X_8 = 186,7 + 1,02X_9$.

We can state that by constructing the regression we found a statistically significant relationship between the outcome variables C3 "volume of innovative products and services" and "volume of innovative products and services of the organizations that realize technological innovations" in 2007. The analogous regressions were built for 2010[4]: $X_8 = 172,3 + 1,18X_9$.

Regressions demonstrate that the volume of innovative products is positively dependent on the volume of innovative products of firms that innovate technologically. This, among other things, means that the state should stimulate activities of firms with the non-financial levers: promote technical parks, technopolises, and different types of associations of innovative firms.

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[3] Regression coefficients are statistically significant at the 95% level. There are no effects of multicollinearity and heteroscedasticity. R^2=0,99.

[4] Regression coefficients are statistically significant at the 95% level. There are no effects of multicollinearity and heteroscedasticity. R^2=0,98. Darbin-Watson coefficient is greater than 2.

3.1.3 The comparative analysis of the innovation profile of the Siberian regions and Russia (table 4)

Table 4: Factors explaining the innovative development of Siberia and Russia in 2007 and 2010

Siberian Regions		Russian Federation	
2007		**2007–2010**	
Factor	*Variables*	*Factor*	*Variables*
Factor 1. Investments in R&D and human capital	X_1 – number of organization carrying out R&D; X_2 – personnel in R&D; X_3 – number of PhD students; X_{12} – internal expenses on R&D	Factor 1. Education of graduate students, expenses on R&D and the effectiveness of patenting activity	X_3 – number of graduate students; X_{10} – number of patent applications; X_{11} – number of patents obtained; X_{12} – internal expenses on R&D
Factor 2. Volume of innovative products	X_8 – volume of innovative products and services; X_9 – volume of innovative products and services of the organizations that realize technological innovations	Factor 2. Volume of the innovative products	X_8 –volume of the innovative products and services; X_9 – volume of innovative products and services of the organizations that realize technological innovations
2010			
Factor	*Variables*	*Factor*	*Variables*
Factor 1. Investments in R&D and human capital	X_1 – number of organization carrying out R&D; X_2 – personnel in R&D; X_4 – number of critical technologies created; X_{12} – – internal expenses on R&D	Factor 1. Education of graduate students, expenses on R&D and the effectiveness of patenting activity	X_3 –number of graduate students; X_{10} –number of patent applications; X_{11} – number of patents received; X_{12} – internal expenses on R&D
Factor 2. Expenses on technological innovations	X_7 – expenses on technological innovations	Factor 2. Volume of the innovative products	X_8 – volume of innovative products and services; X_9 – volume of innovative products and services that realize technological innovations
Factor 3. Share of innovative organizations	X_6 – share of organizations that realize technological innovations		

Another method that allows us to diagnose the innovation development and can influence the realization of the differentiated regional innovation policy for different groups of regions is the cluster analysis (Markov and Yagolnitser, 2006; Untura, 1998).

4   HIERARCHICAL CLUSTER ANALYSES

We then use hierarchical cluster analysis to group regions of the Siberian Federal District into groups with a similar innovation policy5. Cluster analysis results for 2007 for Siberia are demonstrated below (Figure 1).

Looking at Figure 1 we conclude that all regions group into three large clusters and Novosibirsk Oblast as a region with the highest number of research personnel and patents forms a separate cluster. Analogous results for 2010 are presented in Figure 2.

It is evident from the figure that cluster analysis results are almost the same for 2010 and 2007. Novosibirsk Oblast again represents the separate cluster but a new cluster containing small regionsand Zabaykalsky Krai forms. Changes affect other regions in 2010; now small regions belong not to one but to several clusters. Moreover, Altai Krai and Kemerovskaya oblast form one cluster together with small regions.

Distance between clusters
-------------------------5-----------------10-----------------15------------20--------------25
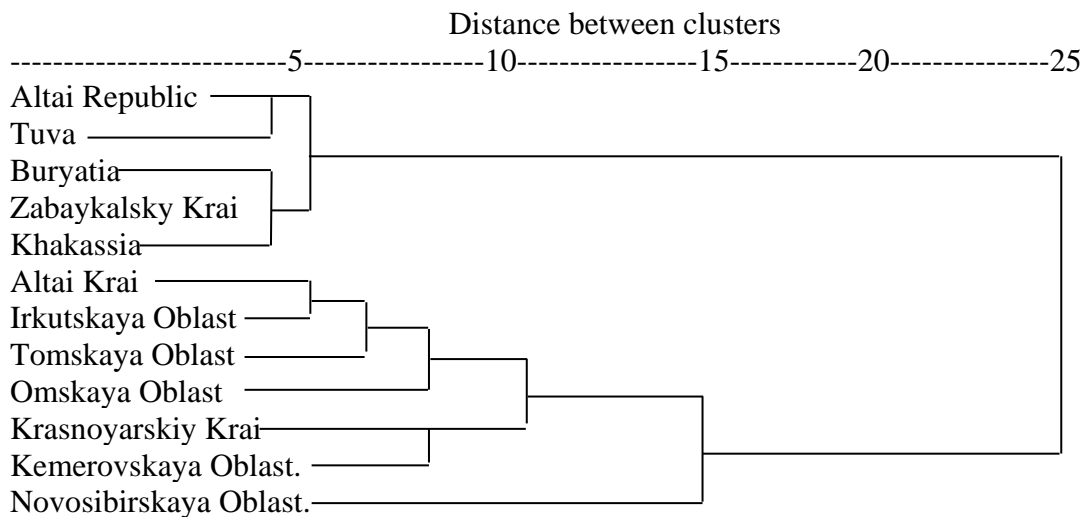
Figure 1: Cluster Analysis for Siberia regions in 2007

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5 The Ward method is used for calculation of the hierarchical clusters. According to this method initially each object forms its own cluster. At the next step the distance between objects is measured and the pair of objects with the smallest distance between them forms the next cluster. The procedure is repeated until clusters of approximately same size are formed and the inter-cluster variance is minimized. We use Euclidean distance is a measure of the distance because it facilitates the discrimination of clusters. Choosing from a variety of methods we first decided to apply "the nearest neighbor" method. This method states that the distance between the two closest objects in the nearest cluster defines the distance between clusters. There is an alternative method called the farthest neighbor method according to which a distance is defined as the largest distance between two objects in the different clusters. This alternative method was then used because the results were easily interpreted.

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Distance between clusters

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--------------------------5-----------------10-----------------15------------20--------------25
Altai Republic
Khakassia
Zabaykalsky Krai
Tuva
Altai Krai
Kemerovskaya Oblast
Krasnoyarsk Krai
Irkutskaya Oblast
Tomskaya Oblast
Omskaya Oblast
Novosibirskaya Oblast
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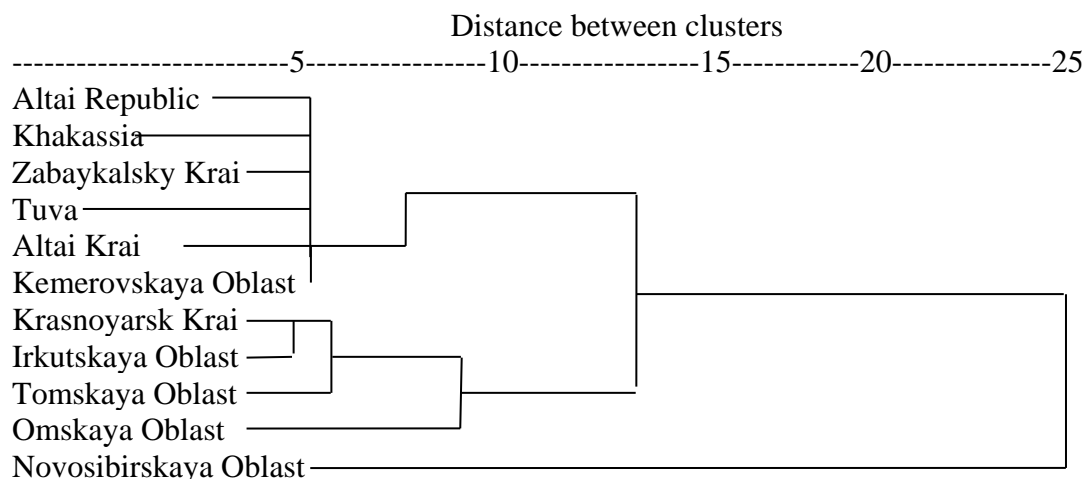
Figure 2: Cluster analysis for Siberian regions in 2010

After having analyzed the results of the hierarchical cluster analysis presented in Figures 1 and 2 the authors excluded the factor of size of the regions. To do that all indicators were changed to the following:
- number of graduate students per 10 000 people;
- number of researchers per 10 000 people;
- expenses on technological innovations per 1000 rubles of GRP;
- volume of innovation products and services per 100 rubles of GRP, etc.

Two indicators were excluded from the analysis:
- number of organizations carrying out R&D;
- share of organizations that realize R&D in the total number of organizations.

After that the standard hierarchical cluster analysis procedure was performed for 2007 and 2010. The "farthest neighbor method" and Euclidian distance were again applied. The results are presented in Figures 3 and 4.

Figure 3 demonstrates that all Siberian regions group into the four large clusters. Kemerovskaya Oblast represents a separate cluster as a region with the greatest volume of innovative products per 1000 RUR of GRP and the greatest number of the leading technologies used per 1000 researchers. Tomsk and Novosibirsk Oblast as the regions with similar innovation profiles also represent the separate cluster. As before, small regions are grouped together into the third cluster. All other regions are grouped into the forth cluster.

Distance between clusters
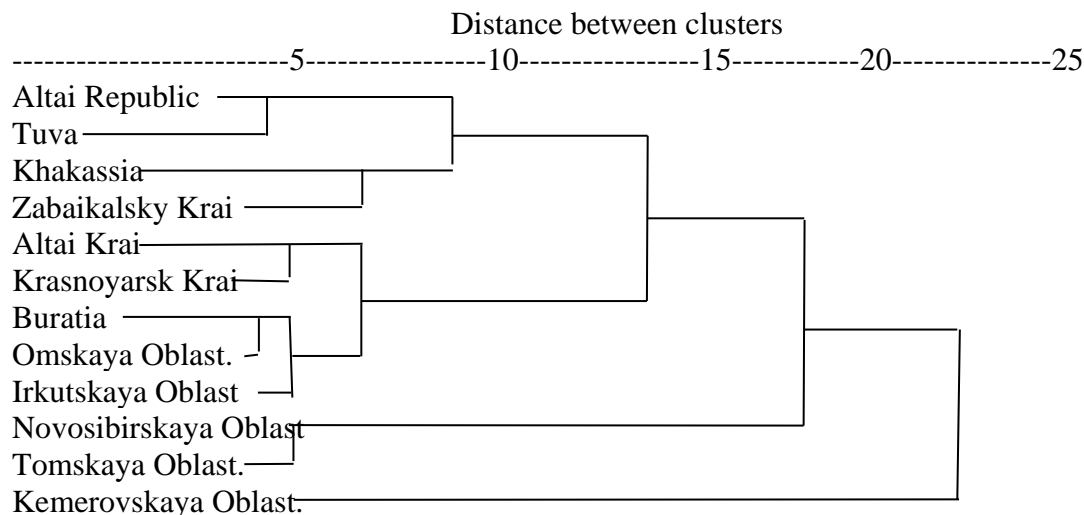
Figure 3: Results of the cluster analysis when taking into account the size of regions, 2007
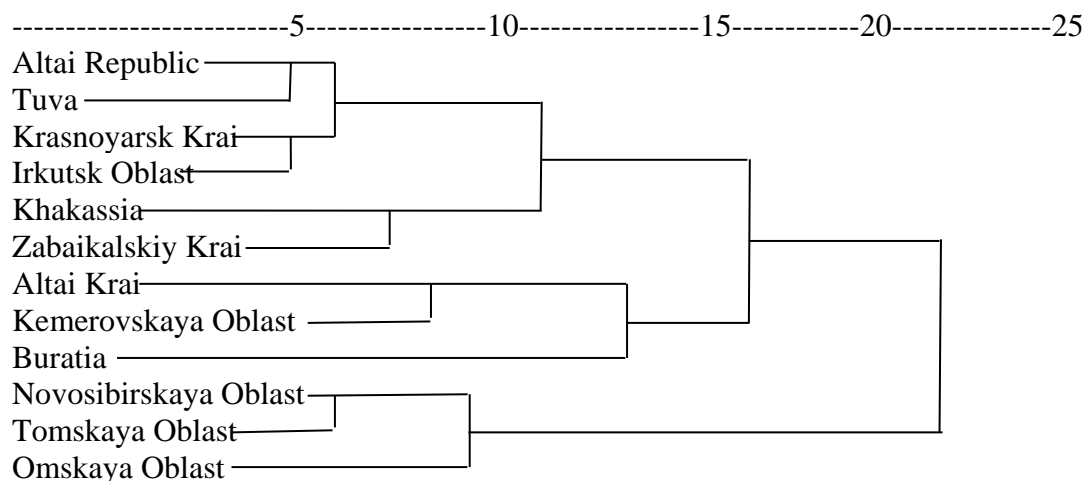
Figure 4: Results of the cluster analysis when taking into account the size of regions, 2010

Results of the cluster analysis of the Siberian regions when taking into account size of the regions (Figure 4) for 2010 are hard to interpret. At the first iteration Novosibirsk, Tomsk and Omsk Oblasts form one cluster and Altai Krai and Kemerovo Oblast form a different cluster. The third cluster includes Tuva and Altai Republic. After taking into account the size of the regions small regions now belong to different clusters in accordance with different priorities of their innovation policies.

5   CONCLUSION

Regression analysis demonstrated statistically significant positive relationships between the variables X_8 and X_9 at the level of the Siberian Federal District. Also regressions can be used to forecast profiles for the near future. The hierarchical cluster analysis showed that in 2007 in Siberia three clusters existed. Novosibirsk as the innovation leader formed the separate cluster. Small regions also were grouped separately. Similar results were obtained for 2010. The exclusion of the size factor led to the change in the cluster structure. Novosibirsk and Tomsk Oblasts were included in one cluster as the regions with the similar innovation

profiles. Small regions again formed the separate cluster. Results for 2010 were non-demonstrative and difficult to interpret.

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THE EFFECT OF PUBLIC INVESTMENT AND FIRM-BASED INVESTMENT INCENTIVES ON EMPLOYMENT: A PANEL DATA ANALYSIS FOR TURKEY

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ABSTRACT

This paper investigates the effects of two public policies, public investments and the firm-based investment incentives within the context of Law No. 5084, which considers the support of employers' social security premium payments on the private sector employment at the NUTS 3 regional level (81 provinces) of Turkey for the period of 2002-2011. To the best of the author's knowledge, there appears to be no empirical study that deals with the effectiveness of both public investment and the investment incentive within the context of Law No. 5084 on employment at the regional level. The results indicate that both public investments and incentive investment have a positive impact on employment. Moreover, the estimation results show that provinces where firm-based incentive investment was applied within the context of Law No. 5084 indicate a significantly better effect on employment in the following year. However, during the interpretation of the analysis one should also take into account the faults of the implementation. On the other hand, public investment for infrastructure and education also affected employment positively.

Keywords: Employment, Firm-based investment, Public investment

1 INTRODUCTION

Although the effectiveness and the success of the public policies on private sector performance have been discussed since the earlier regional development policies, they still preserve their prominence in the development process of countries, especially to stimulate economic activities in the lagged regions and thus to attract investment, government support for firms' production and investment costs by applying public policies. Therefore, firms' competitiveness and the scale of new investments will increase and new employment opportunities will be revealed.

Turkey, which is an emerging economy, has been struggling with regional and local economic development problems like many other developed and developing countries. One of the main problems in Turkey is the unbalanced economic development between eastern and western regions of the country. Since the inception of the Turkish Republic and with the initiation of the planned period since the 1960s, different regional development policies have been implemented in order to induce investment, to create jobs and to increase growth in low income regions to equalise interregional per capita income. While, in the period of etatism, the main attempts were towards the redistribution of public services and industrial investment to different parts of the country in order to develop a national economy, since the planned period regional development policies have focused on the growth centres. After the 1980s, following the rise of endogenous development theories in regional economy, the incentives for enhancing local potentials in priority regions for development (PRD) was applied in the regional policy of Turkey (http://research.sabanciuniv.edu/8875/1/MILESTONES_OF_REGIONAL_POLICY_IN_TU RKEY.doc). In the 1990's, in parallel with the rise of the new regionalism approach, the

effect of active regional policies in general and the necessity of public intervention gained importance (Karaçay-Çakmak and Erden, 2004; Pirili, 2011). In this context, during the last decades of the 20th century, Turkey's attempts to adopt the regional policy criteria of the EU in order to harmonise its legislation and the effect of public policies in regional economic development also became important in Turkey. Within this framework, Law No. 5084 enacted in 2004 comprises of the incentive for regional investment and employment as the most comprehensive and the most recent regulation for 49 provinces.

Investigating the impact of public policies, in this context public investment and incentives, together or separately on output and employment has been an issue for limited empirical studies dealing with the national and regional levels of Turkey in recent years (see Kaynar, 2001; Karaçay-Çakmak and Erden, 2004; Ay, 2005; Erden and Karaçay-Çakmak, 2005; Akan and Arslan, 2008; Özkök, 2009; Eser, 2011; Yavan, 2011). The results of these studies generally point to the positive effects of investment incentives on output and employment. However, some studies found no clear evidence of the positive effect of investment incentives (see for instance Karaçay-Çakmak and Erden, 2004; Erden and Karaçay-Çakmak, 2005; Eser, 2011). Eser (2011) concluded that, although the effect of investment incentives with Law No. 5084 increased employment in the less developed regions, due to problems arising from the structure of investment incentives they were sometimes inefficient in directing the investments in terms of regions and sectors. On the other hand, most of the limited number of empirical studies analysed the impact of public investments on income with the national and regional levels (see Karadağ, Önder and Deliktaş, 2004; Yıldırım, 2005; Deliktaş, Önder and Karadağ, 2009; Önder, Deliktaş and Karadağ, 2010). According to the findings of these studies, public investment is an effective policy tool for increasing regional income and reducing regional disparities.

Therefore, the main aim of this paper is to analyse the effects of two public policies, public investments and the firm-based investment incentives within the context of Law No. 5084, which considers the support of employers' social security premium payments on the private sector employment at the NUTS 3 regional level (81 provinces) of Turkey for the period of 2002-2011. To the best of the author's knowledge, there appears to be no empirical study that deals with the effectiveness of both public investment and the investment incentive within the context of Law No. 5084 on employment at the regional level. In this respect, the present study is the first attempt to investigate the effects of both public investments and the incentive investment on employment by using panel data analysis.

The remainder of this paper is organised as follows. Section 2 provides basic information about the regional development theories. Section 3 gives brief information about public investments and the investment incentives in the regional development of Turkey. The methodology and the data set employed in the study are presented in Section 4. The panel data estimation results are given in Section 5. The paper concludes with a summary analysis of the findings in Section 6.

2   THE REGIONAL DEVELOPMENT POLICIES

The regional disparity which is the economic and social opportunity gap among regions has been one of the most important issues in terms of economic and regional development in all countries since the industrial revolution. During the development efforts of countries, while some regions stand out among others and attract capital, investment and population, some regions lag behind. Since regional disparities threatened the economic development of

countries, finding a solution became necessary for all countries. First of all, there was an attempt to explain regional disparities in terms of economic, historical, geographical, social and cultural factors. However, due to insufficient explanation of these factors, the need for new approaches emerged.

The method of solving regional disparities differs according to the dominant economic approach in the world economy. Although many differences, controversies, conflicts and renewable theories could be observed from the 1930's to the mid-1970's, the common aim of all approaches was to emphasise the necessity of implementation of active public intervention to eliminate income inequalities and to boost economic and regional development. During this period, due to the hegemony of Keynesian economics, the widespread solution of inequalities was based on government intervention and planned development (Karaçay-Çakmak and Erden, 2004; Kadıoğlu, 2007; Pirili, 2011).

However, at the end of the 1970's, traditional regional development approaches started to lose their hegemony. This was due to Keynesian economics having failed to find solutions for consecutive economic crises, and the globalisation trends which emerged with the rapid improvement of technology, which also affected regional development aspects. Secondly, the unsuccessful results of the traditional regional development policies for reducing the income gap between developed and developing countries and the regions in the 1950's and 60's weakened the fundamental basis of active and planned regional policies. Moreover, countries could not afford to finance regional planning policies due to economic crises. Therefore, the Keynesian approach, government intervention in economic development and thus the implementation of public investments and incentives were abandoned, and the Neo-Classical economic policies which advocated the shrinking of government in every field of the economy were revived. In this context, the subjects of economic stabilisation, deregulation, privatisation and economic efficiency started to be discussed. However, although the intensive use of regional planning, public investments and investment incentives decreased, they continued to be used (Karaçay-Çakmak and Erden, 2004; Pirili, 2011). At the end of the 1970's, with the effect of the Neo-Classical paradigm and globalisation, a new regional development approach started to arise. Instead of a government controlled development model, the new model - called 'endogenous regional development' - was based on regional or local entrepreneurship and self-developed mechanisms.

However, since the 1990's, the importance of regional development differences and the implementation of active regional policies in general and the necessity of public intervention have revived again. Following these developments, the reasons of emerging new aspect - called 'new regionalism' - can be classified as follows: especially since the mid-1990's, the local unit-based approach to regional or local entrepreneurship was not effective in less developed countries and regions due to limited resources and inadequate opportunities. The new regionalism and the new role of the government were also evaluated in the EU's regional development policies. Throughout the enlargement process of the EU, with the integration of less developed countries and regions, the significant income gap between regions started to threaten the economic and social integration of the EU. For this reason, and to reduce income disparities, the implementation of regional development policies and thus the need for public policies became important (Buton, 1998; Pirili, 2011). Under the framework of EU regional development policies, the EU adopted the obligation of using public funds to boost economic activities for private investment and entrepreneurship in less developed regions parallel with a new regionalism approach (Karaçay-Çakmak and Erden, 2004). Therefore, in the 1990's a

new regional development approach was formed with the contribution of the 'new economic geography', which adopted the theoretical and technical propositions of the endogenous growth model to the spatial and regional level (Krugman, 1991a; Krugman, 1991b; Porter, 1990) and the Neo-Shumpeterian approach (see also Pirili, 2011).

Within this framework, the regions with efficient infrastructure and human capital and sufficient institutions contributing technological improvement and innovation would develop and grow more than other regions. Therefore, the importance of the government's contribution or the effect of public policies in regional economic development became important. In this context, this study focuses on the effectiveness of two significant public policy tools, public investments and investment incentives, in the economic development of regions and, therefore, in employment.

Public investments are one of the most preferred tools for governments to reduce disparities between regions and to boost economic development (Sturm, Jacobs and Groote, 1999). Public investments are composed of various types of physical investment, such as transportation, energy, water and social investments (human capital investments) such as health, education and services. In this context, the types and the geographic distribution of public investment projects are two of the most controversial issues in regional development.

Due to less developed regions lagging behind, they cannot boost economic activities by themselves with their limited resources. The main characteristic of the less developed regions is the low income level because of the lack of employment-creating economic activities. In this case, to improve the environment for entrepreneurship and to attract new investment into less developed regions, the government should apply some facilities and advantages to the entrepreneurs that prefer to invest in these regions. Therefore, public investments support the physical and social development of the regions and increase the attractiveness of the regions for investment. As a result, a region with adequate infrastructure, low cost energy and effective human capital will attract investments, increase economic activities and therefore create employment. Another significant tool used to reduce disparities among regions is investment incentives.

Investment incentives are another important regional development tool that has been used in many countries. As a public policy, investment incentives play a crucial role in boosting the economic activities in the less developed regions, as well as public investment. Incentive is the financial or non-financial support, aid or encouragement that is applied by the government with the aim of providing more and faster development of specific economic activities. One of the objectives of investment incentive policies is to implement specific incentive policies with a view to speeding up the development of economically and socially underdeveloped regions (Özaslan, Dinçer and Özgür, 2006). Incentives can be stated as grants in aid, subsidies, transfer expenditures to producers, premiums and supports (Kadıoğlu, 2007). Without contradicting international obligations and in accordance with the foreseen targets of the development plans and annual programmes, incentive is the support and the lead of investments to eliminate regional disparities, to create employment, to use advanced, suitable and high value added technologies and to provide international competitiveness. The efficiency of incentive tools and the incentive implementations that are used to eliminate regional disparities can differ according to the development programmes and the economic and social characteristics of countries (Ildırar, 2004).

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Incentives (classical incentives) can be classified according to three groups: financial incentives, tax incentives and indirect financial incentives. Financial incentives are grants, loans and loan guarantees and insurance provided by the government. The aim of the implementation of tax incentives is to increase investments and employment in less developed regions, and to support specific sectors and economic activities. The principal and most common tax incentives are tax holidays, accelerated depreciation implementation, investment allowances and tax credits, income and corporate tax reductions, indirect tax exemptions and free zones. In this context, by using these incentives, the plant location choice of entrepreneurships tries to be conducted to less developed regions. By providing these facilities, less developed regions try to become advantageous for starting a new business or decreasing production costs. Indirect financial incentives can be classified as regulatory incentives to improve environment, health, labour and safety standards, and to give education-based incentives for entrepreneurs regarding the infrastructure and pre-investment technical issues, giving priority to public procurement in some sectors or types of investment, protection against imports, and supporting investments that increase exports. In recent years, incentives have been used not only for investment, employment and exports but also to promote R&D and innovation in firms. Through the gaining importance of the development of the small- and medium-sized enterprises (SMEs) and the increase of competition with the support of new initiatives, the components of the incentives expanded to the 'new generation incentives', such as providing information and consultancy activities for SMEs, incubator centres, employment training, suporting R&D centres (Eser, 2011).

Both in the developed and developing countries the ultimate aim of public policies is economic development. In the developed countries, the public policies such as public investments and incentives are applied to develop the lagging regions, to decrease unemployment, to sustain technological improvement and to increase productivity in certain activities. But in the developing countries the importance and the need for public policies increases due to common economic problems such as high inflation, unemployment, high interest rates, increasing debt burden and inequality in income distribution (Özkök, 2009). In the developing countries, public policies play a crucial role in reducing regional disparities, in creating employment, in stimulating the production of value added products, industrialisation, increasing international competitiveness and, therefore, the economic development of the country.

3   REGIONAL DEVELOPMENT POLICIES IN TURKEY

Turkey is composed of different regions with different economic, social and cultural characteristics. Thus, reducing the regional disparities between the regions of Turkey has been an important issue in terms of regional economic policies since the foundation of the Republic of Turkey. In this context, the regional development policies can be evaluated between two separate periods, before and after the 1990's (see also Eser, 2011).

The special importance and the aim of reducing development differences among regions has been attributed to the planned era. The elimination of the imbalance between regions has been one of the priority areas in all development plans devised (Özaslan, Dinçer and Özgür, 2006). From the first development plan (applied between 1963 and 1967) to 1999, development plans have been based on national development rather than regional development. Regional development was considered within the narrow scope of public development planning and evaluated within the framework of an integrated approach including physical, social and economic dimensions. With the initiation of the planned period since the 1960s, regional

policy has been mainly shaped by development efforts focused on growth centres. Especially after the 1980's, following the rise of endogenous development theories in regional economy, the incentives for enhancing local potentials in PRD and supporting local entrepreneurship and local actors have assumed an important place in the regional policy of Turkey (http://research.sabanciuniv.edu/8875/1/MILESTONES_OF_REGIONAL_POLICY_IN_TU RKEY.doc). Priority has been given to underdeveloped territories in the distribution of public investments in all plans and programmes. Through PRD policies the priority was given to the less developed east and south-east Anatolia regions and Black Sea regions. However, except the South-eastern Anatolia Project (SEAP), one the most important of these plans, other integrated regional development policies[1], could not achieve a considerable success. These precautions were not sufficient to eliminate regional differences, migration, and rapid population increase in large cities. The late 1990s and early 2000s, significant developments experienced for regional development incentives. Since the 1990's, Turkey has tried to develop its regional policy in compliance with EU regional policy, introducing structural reforms for reducing regional disparities in the country (http://research.sabanciuniv.edu/8875/1/MILESTONES_OF_REGIONAL_POLICY_IN_TU RKEY.doc). Between these years, direct policies (such as to provide credit facilities) applied to the regions to continue the uncompleted investments in the less developed regions (with Law No. 96/8905 dated 07.11.1996) and with Law No. 4325 dated 23.01.1998 the PRD was identified and incentive policies were introduced for these areas. Also, with Law No. 99/12478 dated 26.02.1999, electrical energy support was provided for investments located in the less developed regions.

3.1 Law No. 5084

In recent years, to reduce regional disparities, incentive policies have become prominent. To speed up the investments and employment and to increase the contribution of the private sector to the regional development, new incentive policies started to be used in 2004. Law No. 5084, enacted in 2004, which comprises incentives for regional investment and employment, is the most comprehensive and the most recent regulation in Turkey (Eser, 2011). The aim of the law is to increase investment and employment in the less developed provinces by implementing tax and insurance premium incentives, giving energy support and providing free investment place allocation. Law No. 5084 comprises 49 provinces.

In the first version of Law No. 5084 in 2004, 36[2] provinces were selected according to the following criteria: The per capita GDP level was lower than 1,500US$ in 2001 and provinces were evaluated in the PDAs. The private firms located in these provinces could benefit from the income tax being withheld from the wages of new personnel, treasury's contribution to the employers' social insurance payments, energy support and the investment place free of charge. In 2005, with Law No. 5350, 13[3] provinces whose social economic development index as

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[1] Other regional policies: Eastern Marmara Planning Project, Antalya Region Project, Çukurova Region Project, South-eastern Anatolia Project (SEAP), Zonguldak-Bartın-Karabük Regional Development Project, Eastern Anatolia Project, Eastern Black Sea Regional Development Plan and Yeşilırmak Basin Development Project.

[2] 36 provinces were included in the investment incentives under Law No. 5084 in 2004: Adıyaman, Afyon, Ağrı, Aksaray, Amasya, Ardahan, Batman, Bartın, Bayburt, Bingöl, Bitlis, Çankırı, Diyarbakır, Düzce, Erzincan, Erzurum, Giresun, Gümüşhane, Hakkari, Iğdır, Kars, Kırşehir, Malatya, Mardin, Muş, Ordu, Osmaniye, Siirt, Sinop, Sivas, Şanlıurfa, Şırnak, Tokat, Uşak, Van and Yozgat.

[3] 13 provinces were included in the investment incentives under Law No. 5350 in 2005: Kilis, Tunceli, Kastamonu, Niğde, Kahramanmaraş, Çorum, Artvin, Kütahya, Trabzon, Rize, Elazığ, Karaman and Nevşehir.

determined by the State Planning Organisation (SPO) was found to be negative in 2003, were included in the scope of the classification. Moreover, with Law No. 5615, the Gökçeada and Bozcaada districts of Çanakkale[4] were included within the scope of the incentives (http://ekutup.dpt.gov.tr/plan/plan9.pdf).
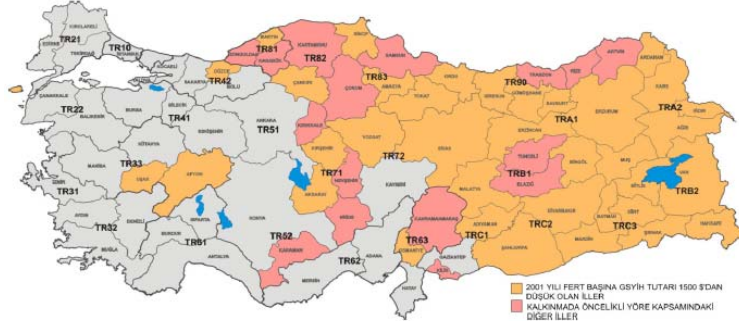
Figure 1: Provinces under the Law no 5084 (Eser, 2011)

According to Figure 1, except for Gaziantep, nearly all the provinces in east and south-east Anatolia were included in the scope of Law No. 5084. In the western part of Anatolia only Kütahya, Uşak, Afyon and Düzce and the Bozcaada ve Gökçeada districts of Çanakkale were included. In Figure 1, the significant development differences can be observed between the eastern and western parts of Turkey, therefore the aim of Law No. 5084 was to eliminate this disparity.

To this end, the incentives applied within the framework of Law No. 5084 comprise an income tax withholding incentive, employer's contributions in insurance premium incentive, free investment place allocation and energy support (http://www.gib.gov.tr/index.php?id=820). The investment incentive Law No. 5084 which is analysed in this study comprises social insurance payment of employers' contributions by the treasury. According to the law, on the condition that firms locate in the determined provinces and provide all requirements, the treasury will contribute the total share of employers' social security premium payments if the private firms' located in the organised industrial zones, otherwise the treasury will contribute the 80% of the share of employers' social security premium payments if firms locate in other places. However, to cope with the latest financial crisis in 2008, the implementation of Law No. 5084 extended until 31.12.2012 for all incentives except energy support (http://uye.yaklasim.com/filezone/yaklasim/tummevzuat/sgk_genelgeleri/6408866.htm).

4   EMPIRICAL MODEL AND THE DATA
This study tries to reveal the effectiveness of public investments and firm-based investment incentives on employment. Public investments comprise investments for infrastructure and education which can motivate private sector employment. The investment incentive is the incentive of social security premium payments to the private firms which locate in the less developed provinces of Turkey. Hence, a panel data analysis was used by employing data over 10 years.

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[4] Due to their not being provinces, these small districts are not included in the analyses.

In order to assess the quantitative analysis of the effects of the public policy instruments (public investments and the firm-based investment incentives) on regional employment for the period 2002- 2011, a simple panel regression can take the following form:

$$LogEMP_{it} = \beta_0 + \beta_2 INVINC_{it} + \beta_3 LogEDU_{it} + \beta_4 LogINF_{it} + \varepsilon_{it} \qquad (1)$$

where $LogEMP_{it}$ is the log of the number of compulsory insured persons in the private sector in province i at time t, $INVINC_{it}$ is the dummy variable taking the value one if firm-based investment incentives are applied in province i at time t and otherwise zero. A significant positive value indicates that the firm-based investment incentive has a positive effect on regional/provincial employment. $LogEDU_{it}$ is the log of the public investments for education in province i at time t, $LogINF_{it}$ is the log of the public investments for infrastructure in province i at time t.

The annual data on employment, public investments for education and infrastructure and firm-based investment incentives data at provincial levels were employed for the aim of the study. The data set covers the time period of 2002–2011 for the NUTS 3 regional level (eighty one provinces) of Turkey. The total number of compulsory insured person in the private sector was used as a proxy for employment. The data was taken from the Social Security Institutions (SSI) for each province. The data for the public investments were taken from the SPO. Instead of using total public investment, public investments for education and infrastructure were included in the model to analyse the impact of specific public policy in stimulating regional employment creation. The infrastructural investments were found by the calculation of energy and transportation investments which are related to output growth and then employment creation in the provinces. The variables were converted into real values using various investment indices. Investment deflators were also obtained from the SPO for the entire period. All the variables are used in logarithmic forms in the study. In order to analyse the effect of firm-based investment incentives within the context of Law No. 5084 a dummy variable was formed for a total of 49 provinces that takes a value of 1 for 36 provinces from 2004 to 2011 and for 13 provinces from 2005 to 2011 after the extension of the law in 2005.

5   ESTIMATION RESULTS

The model (1) was estimated using the panel data regression with one-way fixed effects. Fixed-effect estimation is preferred because the analysis covers the overall provinces and accounts for time-invariant, unobservable heterogeneity among provinces. This choice also corresponded to the results of the F test, which is employed to determine whether to use the fixed-effect estimator or pooled ordinary least squares (OLS). The Hausman (1978) specification test also confirms the presence of fixed-effect model estimation (within estimator). A Hausman specification test shows that the individual effects and the explanatory variables are correlated, therefore indicating that a fixed effects model should be used since a random effects model would be biased (Krumm and Strotmann, 2012; Wooldridge, 2010). During the estimation process, an autocorrelation problem was detected. For this reason, to eliminate the autocorrelation problem, the AR (1) term was included in the equation estimation. The AR (1) term is found to be statistically significant, showing the series does not contain any unit root (Maddala and Wu, 1999; Choi, 2001; Levin, Lin and Chu, 2002). Table 1 summarises the fixed-effects estimation outcomes of the effects of investment incentives and public investments on employment in NUTS 3 regional level (provinces).

Table 1: Estimation Results of the Fixed Effects Panel Data Model

Dependent variable: *LogEMP*

	Coefficient	Standard Error	t-Statistic	Prob.
C	4.2948	0.276	15.583	0.000[*]
INVINC	0.0657	0.016	4.004	0.000[*]
LogINF	0.0129	0.003	3.972	0.000[*]
LogEDU	0.0122	0.005	2.041	0.041[**]
AR(1)	0.9284	0.012	74.807	0.000[*]
R-squared	0.996	Mean dependent var.		8.925
Adjusted R-squared	0.996	S.D. dependent var.		6.606
S.E. of regression	0.191	Sum squared resid.		21.465
F-statistic	2157.88	Durbin-Watson stat.		1.969
Prob(F-statistic)	0.000			

Notes: * and ** denotes 1% and 5% levels respectively

The results in Table 1 suggest that, as expected, all the estimated coefficients that affect the employment in NUTS 3 regional level (81 provinces) of Turkey are positive and significant at the 1% and 5% levels of significance. Thus, the results suggest that both public investments and incentive investment have a positive impact on employment. Moreover, the estimation results show that provinces where firm-based incentive investment was applied within the context of Law No. 5084 indicate a significantly better effect on employment in the following year. In line with the expectation, the investment incentive which was given to private firms in the less developed provinces to support the share of employers' social security premium payments is significantly effective on employment. Considering that the total number of compulsory insured persons in the private sector is a proxy for employment, this positive relationship is meaningful. Although the employment growth rate was higher in the provinces under the scope of Law No. 5084 than other provinces also stated in (Eser, 2011), it is important to consider that Law No. 5084 is a firm-based investment incentive and firms, under the condition of at least employing 10 employees and locating in the less developed provinces, can benefit from the insurance premium incentives. In this context, because the employment data that was used in this study comprises the total number of compulsory insured persons in the private sector, it is important to take notice of the increased number of insurance registered workers. Also, as stated in Eser (2011) and Turkish Employment Agency, it was found that some firms try to use Law No. 5084 illegally. To benefit from the advantages of the incentive, by employing at least 10 employees, some firms recorded employees that work informally or else, without working, some firms recorded their relatives to provide insurance facilities. For this reason, although during the interpretation of the analysis it is difficult to prove, it is important to take this special issue into consideration.

The second variable - public investment for infrastructure - is also positively related to employment. A sufficient infrastructure system in the region will attract private firms and individuals and then, by increasing production and employment, it will boost regional development. According to the new economic geography, transportation infrastructure is the basic factor which determines firms' location decisions and the scale of economic activities (Krugman, 1991a; Venables, 1996). Firms will agglomerate in the regions where low energy costs and transportation facilities are provided. Regions which provide lower energy costs will attract more investment and then create employment. To cope with global competitiveness, firms should consider low cost production, productivity and access to large

markets (Demir and Sever, 2008). In this case, especially in the less developed countries, not only aiming to boost national development but also aiming to reduce regional disparities by providing a sufficient infrastructure system will attract private investment, create employment and increase development.

Another significant variable that has a positive impact on employment is public investment in education. Returns on investment in education based on human capital theory have been estimated since the late 1950's (Psacharopoulos and Patrinos, 2002). Human capital theory puts forward the concept that investments in education increase future productivity. In this context, public investments on education indirectly affect the private sector by increasing the productivity and the efficiency of labour and also contribute to the reduction of regional disparities. Educated, productive, skilful, capable of using high technology and highly qualified workers will affect the production, income and development of the regions and therefore countries. Especially in the less developed regions, through public investment on education, different individual opportunities to generate income will converge and boost the employment of labour.

6   CONCLUSION

In this study, the effect of public investments and investment incentives on the private sector employment at the NUTS 3 regional level (81 provinces) in Turkey was analysed. Turkey, as a developing country with unbalanced economic development among its regions, uses various public policies such as public investments and investment incentives to reduce regional disparities and to boost private sector performance. Investment incentives and public investments can be considered important public policy tools explaining the spatial distribution of economic activity, and therefore of employment.

In this context, there are two significant public policy tools: public investments (infrastructure and education) which can motivate private sector employment and firm-based investment incentives which are insurance premium incentives applied to private firms which locate to the less developed provinces of Turkey. Within this framework, in the analysis, the implementation of Law No. 5084 which enacted in 2004 is taken into consideration. Law No. 5084 is the most comprehensive and the most recent regulation in Turkey and comprises the incentive of regional investment and employment. Therefore, the effectiveness of the investment incentives was analysed under the scope of Law No. 5084 which was applied in 49 less developed provinces. Thereby, the panel data analysis was used by employing data for the period of 2002-2011.

The results indicate that both public investments and incentive investment have a positive impact on employment. Moreover, the estimation results show that provinces where firm-based incentive investment was applied within the context of Law No. 5084 indicate a significantly better effect on employment in the following year. However, during the interpretation of the analysis one should also take into account the faults of the implementation. On the other hand, public investment for infrastructure and education also affected employment positively.

Moreover, the results of the study imply that the presence of public policies, public investments and investment incentives give rise to increase employment in less developed provinces. Although the implementation of investment incentives has been the most debatable issue in Turkey, investment incentives are found to be influential in the less developed

provinces. It can be concluded that, provided they are monitored strictly, public investments and incentives could be directed towards less developed regions in order to create employment.

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ROLE OF ST. JOHN'S WORT NATURAL HABITAT PRESERVATION ON SUSTAINABLE DEVELOPMENT OF LOCAL ECONOMY

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ABSTRACT
Economic growth has been interesting subject for society policymakers during last two centuries. Although growth process caused increase society welfare, but in the long run, it will bring destruction and conversion of natural resources. Economic and social developments, lead to loss the natural habitat for other organisms. One of the destruction signs, conversion of natural grasslands to agricultural land. In this study by investigating of natural habitat of St. John's Wort, Hypericum perforatum, in Mazandaran province we measured importance of human activities on decrease of its natural habitat. In this direction, Economic Assessment process is carried out. Data are gathered from official statistics of the Ministry of Agriculture. Methodology used is social cost-benefit ratio. The results showed that by real prices, with changing from natural habitat of this plant to farmland has caused Community disadvantage and against the sustainability objectives.

Keywords: Cost-benefit, Hypericum perforatum, Ratio, St. John's Wort, Sustainable development

1 INTRODUCTION

The genus *Hypericum* L. belongs to family *Guttiferae* and includes about 450 species (Robson, 2003). *Hypericum* species have been used as medicinal plants for centuries and have an important place among medicinal plants.

The economic importance of the genus *Hypericum* resides largely in a wide range of medicinal effects exhibited by *Hypericum perforatum* L. such as anti-inflammatory, antiviral, antimicrobial, antifungal, cytotoxic, and antidepressant activity (Pilepić et al., 2010). In external use for skin wound healing and burn treatments is used. Recently, much attention has been given to this plant for the treatment of AIDS.

Hypericum species contain a number of biologically active compounds such as hypericin, pseudohypericin, hyperforin, adhyperforin, xanthones, flavonoids, biflavonoids, tannins, and phenolic acids (Greeson et al., 2001). *H. perforatum* is the most important and commercially recognized representative species among *Hypericum* species (Karioti and Bilia, 2010). *H.*

perforatum was among the top 10 best-selling herbal dietary supplements sold in the food, drug, and mass market channel in the United States for 2008, with sales of about $8.2 million (Cavaliere et al., 2009). The production, consumption, and international trade in medicinal plants and phytomedicine (herbal medicine) have grown and are expected to grow further in the future.

Human population growth and the subsequent increase in demand have led to reduce coverage and density of medicinal plants. As the main reasons, Excessive harvesting, conversion of forests and grasslands to Arable land caused destruction of herb natural habitat. This destruction is incompatible with sustainable development and costs, such as soil erosion, increased runoff, reduced wildlife populations, extinction of species of wild plants and generally adverse effect on the ecosystem in the long-term will be imposed on society. One of the ways to preserve forests and pastures is understand those economic interests. In this regard, the estimation of economic benefits of herbs can be useful in protecting it. The purpose of this paper is economic evaluation of Hypericum species that exist in pastures of Mazandaran province and compared with the region dominant crop (rice).

2   DATA AND METHODOLOGY

The research data was obtained through the Questionnaire. Because rice and citrus are as two major crops in the region, in this study, economic return of the two products plus *Hypericum* were considered. 106 Rice- producers and 150 citrus-growers were selected. Questionnaire information included costs, and production level and income. The costs of production were divided into two sections: Annual costs and overhead costs. Annual costs included labour (family and workman), chemical input (Types of pesticides and fertilizers), machines (planting and harvesting), seed (in rice) and Sundries (Freight, repairs, workers lunch, and bags). The overhead costs include land (equal by rent) and depreciation (machines building and other fixed asset).

For assessing cropping patterns, the benefit- cost ratio was applied. In this Criterion, the gross income (average) per hectare is divided on annum value of the fixed cost. If one pattern that its ratio is more than the rest patterns, than it will be priority.

$$\frac{Benefit}{Cost} = \frac{Annual\ income - Annual\ cost}{Annual\ equivalent\ of\ fix\ cost}$$

The B/C ratio indicates how much benefit can get with one unit of fix cost (investment).

3   RESULTS AND DISCUSSION

Rice and citrus fruits (especially orange and tangerine) as the main crops are grown in the region. In this section, the profitability of these agricultural products is compared with the net income from natural habitat of the plant of *Hypericum*. Tables 1 and 2 show the analysis of the cost, income and benefit of rice and citrus respectively.

According to table 1, rice production is very labour-intensive. More than one- third of the total cost is related to labour force. Also, about one- half of cost price of rice is related the overhead. High land prices in the area (extreme land limitation and high demand) causes the expensive land opportunity cost. Since the land quality and production technology in the region are non-homogeneous, the range of the variation of production costs is very extensive.

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However, rice production in all areas is regarded an economic activity (profitable). The average B/C ratio is estimated about 1.4.

Table 1: Cost analysis of rice production per ha in Mazandaran province unit: $US

Type of cost	Mean	Min	Max	Share
Labour	840.1	477.2	1183.5	35.3
Chemical inputs	75.9	15.1	136.9	3.2
Machines	236.9	121.3	313.9	9.9
seed	65.5	35.5	82	2.7
Sundries (others)	41	23	70	1.7
Total variable cost	**1259.4**	**672.1**	**1786.3**	**52.8**
Land	634.6	255	1144	26.6
Depreciation	489	235	1168	20.5
Total cost	**2383**	**1162.1**	**4098.3**	**100**
Total revenue (gross)	3983	2500	6100	
benefit	1600	1337.9	2001.7	

Table 2 shows a similar analysis for the citrus. According to this table, the labour-intensive is less than rice, but the overhead cost is more than rice. Gardens of citrus require several items of costs before economic fruiting. For example, ground preparation, fencing, buying and planting trees, growing period costs for 4 to 7 years. Most heterogeneity of gardens financial balance is due to differences in overhead costs. Citrus production turnover is more than rice. The average B / C ratio is estimated about 3.

Table 2: Cost analysis of citrus production per ha in Mazandaran province unit: $US

Type of cost	Mean	Min	Max	Share
Labour	154.4	53	261	11.9
Chemical inputs	135.9	82	15	10.5
Machines	35	0	66	2.7
Sundries (others)	24.1	12	54	1.9
Total variable cost	**349.4**	**147**	**396**	**27**
Land	634.6	255	1144	49
Depreciation	310	112	580	24
Total cost	**1294**	**514**	**2120**	**100**
Total revenue (gross)	5184	3200	7000	
benefit	3890	2686	4880	

In Table 3, the available benefits in each ha of *Hypericum* are estimated. Since this plant isn't produced now (as an agronomy plant), only the benefit of wild plant in its natural habitat is calculated. In the first step, yield of *Hypericum*, (fresh and dried forms) is measured. Then, using the technical coefficients obtained from Georgeta study (2001), the amount of the valuable material of Hypericin is estimated. Finally, considering the average price of 3% Hypericin concentration, the gross profit is calculated. Certainly by human intervention in growing and maintaining of the plant, the amount of technical and economic return will increase. Because *Hypericum* as a wildlife plant has no production costs, there is no item in

the denominator of ratio when the B/C ratio is calculated. So the only cost is the land opportunity cost which is equated with land rent for rice and citrus. With this assumption, the ratio of B/C in the plant is 4.7 that are more than rice and citrus.

Table 3: Gross income of per ha of Hypericum

Description	Mean	Min	Max
Herb yield per ha (Kg)	14998.3	12431.7	17565
Dry herb yield (Kg)	8999	7459	10539
Dry inflorescence yield (Kg)	18.2	10.2	26.4
Hypericin content (mg)	18.2	10.2	26.4
Hypericin value ($US)*	6333.6	3549.6	9187.2

*1Kg of hypericin (3%) = 10$US

In Chart 1, the B/C ratio of three alternatives products are shown. Conversion of farm land (rice) to garden land (citrus) is a confirmation of these results. But since there aren't any units of Extractor hypericin in region, the interests of *Hypericum* is unknown for public. By investing in the processing and extracting industries of the plant, we can expect maintained pastures will be economic for the community, and this event is in the same line with sustainable development. By sensitivity analysis, if the price of Hypericin decreased to $ 0.63 instead of $1, Hypericum still has profit advantage to citrus production.
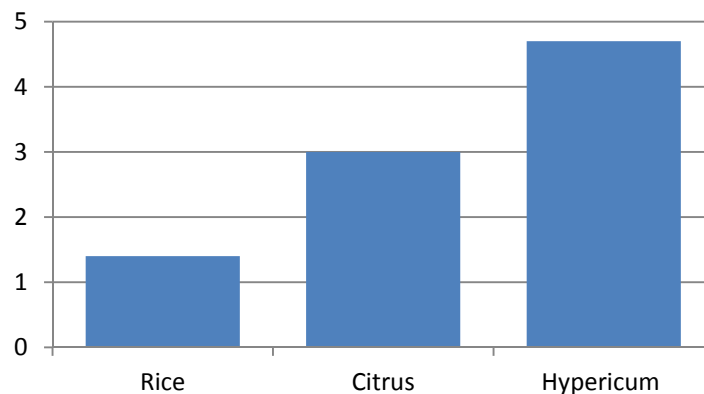
Chart 1: The B/C if three alternative product

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AGENCY COSTS AND CAPITAL STRUCTURE CHOICE IN EMERGING MARKETS

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ABSTRACT
The debt-to-equity choice has always been one of the crucial decisions of the firm's management. The capital structure is vital for the appropriate development of relationships among the company's stakeholders. The conflicts of interests between management and shareholders and creditors as well as conflicts between other groups of stakeholders lead to the appearance of agency costs that decrease the corporate value. The role of agency costs is even higher in emerging markets due to higher information asymmetry, lower development of legal system, investors' protection rights and corporate governance. Our paper contributes to the literature by analyzing the agency costs and capital structure choice on the data of emerging markets companies. Our sample consists of more than 150 companies from BRICS and Eastern Europe within 2000-2010. By conducting the empirical analysis based on both linear panel data regressions as well as simultaneous modeling of leverage choice and management shareholding we obtain the following results. The agency costs are relevant for debt-to-equity choice in Russia, India, China and Eastern Europe but the results are not so obvious in Brazil where financing policy could be explained by trade-off theory. We found out the non-linear relationship between financial leverage and management shareholding which is also in line with agency costs significance. Moreover we revealed that agency costs define long-term leverage, but cannot explain short-term debt in emerging markets. Further, we concluded that debt ratios based on market value of equity are not affected by agency costs opposite to capital structure variables based on book value of equity.

Keywords: Agency costs, Capital structure, Emerging capital markets

1 INTRODUCTION

The choice of capital structure has always been one of the crucial elements of the financial architecture of any firm (Myers, 1999). As financial architecture includes debt–to–equity proportions, ownership structure, and internal corporate governance structures, capital structure becomes a key factor in a firm's value. The capital structure is also vital for the appropriate development of relationships among the company's stakeholders (Opler et al, 1997; Titman et al., 1988). The conflicts of interests between management and shareholders, management and bondholders as well as conflicts between other groups of stakeholders lead to the appearance of agency costs that decrease the value of the company. The role of agency costs in capital structure choice was therefore carefully examined by the researchers in developed markets (Rajan and Zingales, 1995; Vilasuso and Minkler, 2001; Smart et al., 2007). We believe that the role of agency costs is even higher in emerging markets due to higher information asymmetry, weaker legal system and corporate governance mechanisms. However the papers devoted to the agency costs and capital structure interaction in emerging markets are still rare (Chakraborty, 2010; Chen et al, 1997; Icke and Ivgen, 2011; Delcoure,

2007; Deari and Deari, 2009). Thus we contribute to the literature by explaining agency role of financing strategies of the firms in large emerging markets: Brazil, Russia, Eastern Europe, India, South Africa and China.

The paper is organized as follows. We start with the description of agency costs relevance in capital structure choice. We continue with the literature review of empirical papers on agency theory predictions tests to present a set of hypotheses. In the next paragraph we provide the details of the sample and methodology. After that the results of the research are presented and interpreted. Conclusion summarizes the results obtained.

2   AGENCY COSTS AND CAPITAL STRUCTURE: THEORY AND PRACTICE

Agency costs related to capital structure choice were first introduced by Jensen and Meckling (1976). These costs appear as a result of ownership and management functions separation. Samuels (1997) and co-authors define agency costs as direct and indirect expenses that the firm should face to stimulate the management to act in the interests of shareholders and creditors, thus in the interests of all investors.

The influence of agency costs related to shareholder-creditor conflicts on capital structure choice was carefully examined but the results are rather controversial. On the one hand Leland (1998), Moyen (2000), Parrino and Weisbach (1999) concluded that these costs are relatively low and thus have no significant influence on leverage, moreover these costs are insignificant in comparison with the costs that arise from management-shareholders conflicts. On the other hand Childs and co-authors stated that this type of agency costs has a great influence on capital structure choice (Childs et al., 2005).

The degree of management-shareholders agency costs is mostly related to the percentage of shares in management ownership. Several papers revealed the dependence of capital structure and payout policies on the degree of management ownership (Crutchley and Hansen, 1989; Berger et al., 1997; Johnson, 1997). However there could be different explanations of the relationship between the level of chosen debt and management shareholding.

Agrawal and Mandelker (1987) found the direct relationship between the debt level and management ownership. According to the authors the degree to which the management is willing to bear financial risks of the company rises with the management share in equity capital thus leading to the decrease of agency costs. Similar results were obtained by Leland, Pyle (1977) and Kim, Sorenson (1986).

Friend and Lang (1988) however got the opposite results. The authors concluded that the management ownership did not necessarily lead to the decrease of agency costs. Crutchley and Hansen (1989), Friend and Hasbrouck (1987), Jensen, Solberg and Zorn (Jensen et al., 1992) continue with the idea that the existence of costs of financial distress leads to the inverse relationship between debt level and management shareholding. Kim and Sorensen (1986) add that in highly leveraged firms it is easier for the management with substantial ownership degree to keep the control over the firm.

The intricate relationship of financing decisions, company's value and management shareholding led to the appearance of non-linear relationship assumption. Chen and Steiner (1999) empirically proved the non-linear character of the managament shareholding and debt

level relationship that was later also demonstrated by Brailsford and co-authors (Brailsford et al., 2002).

The capital structure in emerging markets has become the focus of academic research in the last decade. The majority of papers however are devoted to the capital structure determinants identification. Although agency costs determinants are also examined there are almost no papers aimed at the careful analysis of various types of agency costs and their influence on debt-to-equity choice.

As the emerging markets differ significantly in the level of institutional, macroeconomic and financial markets development, most papers are aimed at the examination of capital structure choice of a particular country or a group of similar countries Iran (Fathi et al., 2012), Indonesia (Mahadwartha, 2002), Ukraine (Stephan et al., 2011), Macedonia (Deari and Deari, 2009).

The research results do not allow making a final conclusion on the role of agency costs in debt-to-equity choice in emerging markets and vary greatly between countries, research period and methodology applied.

The variability of the results obtained on emerging markets leads to the necessity of thorough analysis of agency costs relevance through the detailed examination of different proxy variables as well as cross-country research. Thus our paper contributes to the literature by introducing the study of capital structure choice under agency costs pressure on emerging markets.

3 METHODOLOGY OF CAPITAL STRUCTURE RESEARCH IN EMERGING MARKETS

Our research model is based on the dynamic partial adjustment model and is constructed to test the following set of hypotheses associated with the role of the agency costs in the debt-to-equity choice:

Hypothesis 1. The higher are selling, general and advertising (SG&A) and R&D expenses the lower is the debt level.

Hypothesis 2. Companies with higher share of institutional investors' ownership tend to have higher debt ratios.

Hypothesis 3. Debt-to-equity ratio is lower in companies where CEO also acts as a Chair of the Board of Directors.

Hypothesis 4. Firms with higher growth opportunities tend to increase the debt level.

Hypothesis 5. There is a nonlinear relationship between managerial ownership and the debt ratio.

Hypothesis 6. The higher is the free cash flow (FCF) the higher is the debt level of the firm.

Our sample consists of large-scale firms from BRICS and Eastern Europe for the period of 2000-2010 financial years. We collected data from Bloomberg database to build panel data for more than 150 companies. We had to take the information from the audited accounting reports and annual reports allocated on the official sites of the companies as well the data provided by the stock exchanges to fulfill the gaps in the sample.

To conduct the research and check the results for robustness we introduce different measurers of capital structure and various proxies for agency costs levels as well as a number of control variables. The description of the variables is shown in the table 1 below.

Table 1: The description of the dependent and independent variables

MO		Managerial ownership share
SGA		The ratio of SG&A expenses to revenue
Instit		Institutional investors share of ownership
RD		The ratio of R&D expenses to revenue
Total5		The largest shareholders' ownership (with a share of more than 5%)
FCF		FCF=(OYBT + DEP – TAX PAID – DIV PAID)/ Book value of equity, where OYBT- operating earnings before tax, DEP-depreciation expenses, DIV-dividends
BOD		Dummy variable: 1 if the CEO is also chairman of the board of directors
Growth		The ratio of the market value of equity to book value of equity
Control variables	PPE	The share of fixed assets (Property, Plant, Equipment)in structure of the company's assets
	ROA	The ratio of net income to total assets
	Size	Natural logarithm of total assets at end of year

The following variables are used as a proxy for leverage:

LEV_T	Short and long-term debt to the sum of total debt and the book value of equity
LEV_TM	Short and long-term debt to the sum of total debt and the market value of equity
LEV_L	The ratio of long-term debt to long-term debt and the book value of equity
LEV_LM	The ratio of long-term debt to long-term debt and the market value of equity
LEV_TA	Short-term and long-term debt to total book value of assets
LEV_LA	The ratio of long-term debt to total book value of assets

The correlation between the independent variables used in the model as a proxy of agency costs, generally confirms the correctness of the variables choice and their consistency. Managerial shareholding is negatively correlated with the free cash flow, growth opportunities, selling, general and administrative expenses, which, being the indicators of agency conflict, should be negatively related to leverage. Share of the largest shareholders is negatively correlated with the SG&A expenses and the share of companies in which the CEO chairs the board of directors - variables that characterize the magnitude of agency costs which also validates the choice of the independent proxy variables.

To test our hypotheses the following panel data regression model was used:

$$LEV=\alpha+\beta_1*MO+\beta_2*MO2+\beta_3*Instit+\beta_4*SGA+\beta_5*Total5+\beta_6*FCF+\beta_7*BOD+\beta_8*Growth+ \beta_9*PPE+ \beta_{10}*ROA+ \beta_{11}*Size+year\_dummy+\epsilon_t \qquad (1)$$

We test random and fixed effects specifications, as well as pooled model of panel data. The choice between these specifications is based on the F-test, Breusch-Pagan and Hausman tests.

However, the possibility of endogeneity (Himmelberg, Hubbard, Palia; 1998; Demsetz, Lehn, 1985) of the managerial shareholding with respect to other characteristics of the company

leads to the necessity of two-step equation models introduction. In this paper a simultaneous equations approach is used to jointly model leverage choice and managerial share ownership:

$$LEV=\alpha+\beta_1*MO+\beta_2*MO2+\beta_3*Instit+\beta_4*SGA+\beta_5*Total5+\beta_6*FCF+\beta_7*BOD+\beta_8*Growth+$$
$$\beta_9*PPE+\beta_{10}*ROA+\beta_{11}*Size+yeardummy+\epsilon_t \quad MO=\alpha+\beta_1*RD+\beta_2*Growth+\beta_3*Size+\beta_4*Instit+\beta_5*LEV+yeardummy+\epsilon_t \quad (2)$$

4 THE RESULTS

The research was conducted separately for different for Chow test proved the impossibility of the samples combination.

For Russian companies the model with random effects was chosen, the results of which are presented in the table. On 5% significance level the managerial share ownership, the managerial share ownership squared, growth opportunities, the share of commercial and administrative costs and firm size revealed to be the determinants of debt-to-equity choice.

Table 2: The regression results for the Russian companies (random effects model)

LEV_LA	Coef.	Std. Err.	z	P>|z|	(95% Conf. Interval)	
				R-sq between = 0.6638 R-sq overall = 0.3545		
MO	0.335672	0.140977	2.38	0.017	0.059361	0.611982
MO2	-0.35104	0.178015	-1.97	0.049	-0.69994	-0.00213
SGA	-0.00092	0.000413	-2.23	0.025	-0.00173	-0.00011
Growth	-0.01292	0.006118	-2.11	0.035	-0.02491	-0.00092
Size	-0.0207	0.009658	-2.14	0.032	-0.03963	-0.00177
Cons	0.357291	0.083535	4.28	0.000	0.193565	0.521017

The results generally confirm the agency theory predictions. The ratio of SG&A expenses to revenue, which approximates the agency costs, is negatively associated with the level of debt. Relatively high SG&A expenses show that there is an agency conflict: managers operate company resources inefficiently, using them to their advantage. Thus, the hypothesis of a negative relationship of agency costs and the level of debt cannot be rejected.

Growth opportunities are negatively related with the level of debt, which is also in line with the hypothesis and the agency theory from the side of both types of agency conflicts: future growth opportunities depend largely on the cost of research and development and advertising, which are not funded predominantly by debt.

The nonlinear relation between the managerial ownership and the debt level was revealed (Figure 1).

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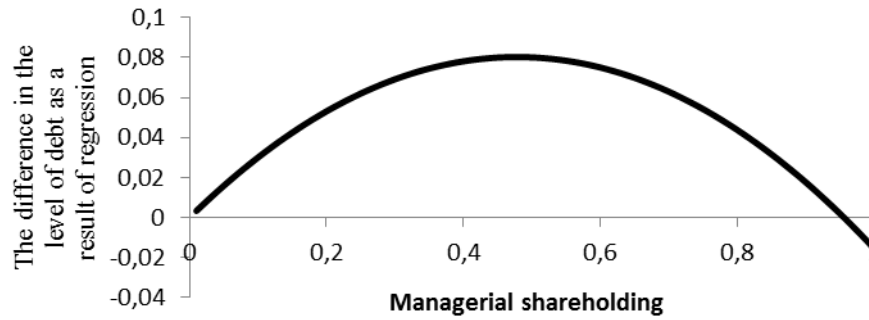
Figure 1: Dependence of the debt level and the managerial shareholding according to the results of the regression analysis for Russian companies

The relation of the level of debt and the managerial share ownership is quadratic. At first, they are positively related, corresponding to the assumptions of agency theory and the theory of Harris and Raviv (1991), turning-point occurs at the point with a share of managerial shareholding of 48%, after which the relation turns to negative. Breakpoint of 48% can be explained by the fact that at this point the managers actually have complete control over the corporation. Researchers note that the negative correlation at high proportion of management due to the fact that the acquisition of management control over the company is associated with the fact that there is no longer effective monitoring by other shareholders. In addition, the decline in the debt level allows them to concentrate control in their hands.

Insignificance of the Board of Directors dummy-variable and the share of institutional investors can be explained by the nature of the data: the average share of institutional investors in the sample is 4.6%, more than 70% of observations characterized by a zero share of institutional investors, the CEO is also a head of the board of directors in only 3% of cases.

Simultaneous estimations analysis of the managerial share ownership and companies' capital structure did not provide significant results for any variants of the debt level, as the variables which have been proposed significant for determination of managerial shareholding were not significant.

Results for China also failed to confirm the assumption of managerial shareholding's endogeneity, while the best model for capital structure determinants was also revealed to be random effects specification. The results of the regression analysis are presented below.

Table 3: The regression analysis results for Chinese companies (random effects model)

LEV_TM	Coef.	Std. Err.	z	P>|z|	R-sq between = 0.6908 R-sq overall = 0.5894
					(95% Conf. Interval)
SGA	-1.807732	2.016463	-4.36	0.000	-3.59928	-0.10446
ROA	-2.478309	0.7606693	-3.26	0.001	-3.969193	-0.9874243
PPE	0.3825565	0.1901522	2.01	0.044	0.0098651	0.7552478
Size	-0.0878604	0.0289421	-3.04	0.002	-0.144586	-0.0311349
Cons	1.214456	0.2812293	4.32	0.000	0.6630609	1.765851

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For Chinese companies the hypothesis about the dependence of the capital structure on the share of selling, general and administrative expenses cannot be rejected: the high level of such costs, indicating higher agency costs, is negatively associated with the level of debt, thus supporting the predictions of agency theory. Other proxies for agency costs are not significant predictors for the Chinese public companies' leverage.

The signs of the control variables' coefficients allow to conclude that both the trade-off (the positive relationship between the provision and the level of debt), and the pecking order theory (a negative correlation between the level of debt and the return on assets and the size of the company) are fair on Chinese market.

For Eastern European companies simultaneous estimation also gave no significant results. Significant are the following variables (Arellano-Bond method):

Table 4: The analysis results for Eastern European companies (Arellano-Bond model)

				Wald chi2(7) = 68.76	Prob > chi2 = 0.000	
LEV_L	**Coef.**	**Std. Err.**	**z**	**P>|z|**	**[95% Conf. Interval]**	
L1.	0.239517	0.081363	2.94	0.003	0.08005	0.398985
ROA	-0.29692	0.118134	-2.51	0.012	-0.52846	-0.06538
MSO2	-5.11379	2.220031	-2.3	0.021	-9.46497	-0.76261
MSO	2.604743	1.128597	2.31	0.021	0.392733	4.816752
Size	0.098124	0.022141	4.43	0.000	0.054729	0.141519
Growth	3.85E-08	8.16E-09	4.72	0.000	2.25E-08	5.45E-08
PPE	-0.18853	-0.18853	-2.05	0.04	-0.36853	-0.00852
cons	-0.57406	-0.57406	-3.27	0.001	-0.91845	-0.22967
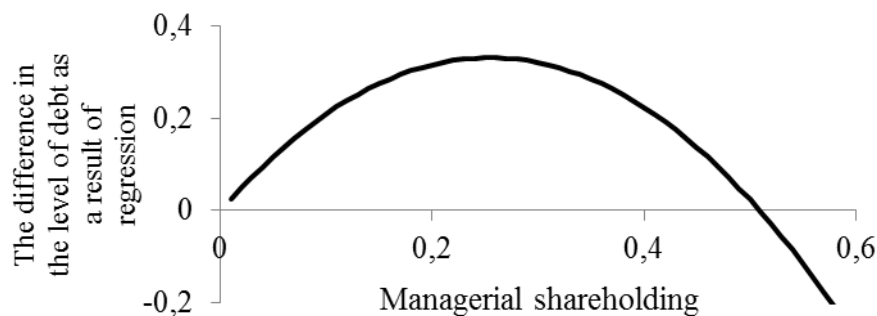
Figure 2: Dependence of the debt level and the managerial shareholding according to the results of the regression analysis for Eastern European companies

For the Eastern European companies a nonlinear relationship between the level of debt and the share of managerial ownership was also confirmed, so it can be can neither accept nor reject the hypothesis of the importance of agency costs when making decisions on capital structure. Signs of significant control variables: negative correlation between debt level and return on asset and tangibility, a positive correlation between level of debt and the size of the company, confirm the significance of both trade-off and pecking order theories in financing decisions of Eastern European companies.

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For India, however, a model of simultaneous estimation of the debt level and managerial shareholding provides significant results:

Table 5: The regression analysis results for Indian companies (simultaneous estimation)

					LEV_L R-sq=0.4823 MO R-sq=0.1749	
LEV_L	**Coef.**	**Std. Err.**	**z**	**P>|z|**	**(95% Conf. Interval)**	
MO	2.029659	0.982606	2.06	0.039	0.101825	3.957493
MO2	-4.812294	2.21747	-2.17	0.030	-9.15845	-0.46613
Instit	0.41862	0.151239	2.77	0.006	0.122197	0.715043
FCF	0.0731054	0.0753649	2.34	0.019	0.074607	0.200818
BOD	-0.21672	0.055307	-3.92	0.000	-0.32512	-0.10832
ROA	-0.74267	0.264098	-2.81	0.005	-1.26029	-0.22505
PPE	0.656628	0.112681	5.83	0.000	0.435777	0.877479
MO						
Instit	-0.40184	0.117495	-3.42	0.001	-0.63213	-0.17155
Growth	-0.00501	0.002651	-1.89	0.059	-0.0102	0.000189
Size	-0.03018	0.009648	-3.13	0.002	-0.04909	-0.01127
Cons	0.524565	0.112998	4.64	0.000	0.303093	0.746036

The results of simultaneous estimation confirmed the endogenous of the managerial share ownership with respect to firm characteristics: institutional ownership, growth opportunities and size.

The results confirm the presence of a nonlinear relationship between the level of debt and the managerial ownership, as in the case of Russia. However, the turning point occurs at significantly lower level than in Russia: about 22% of managerial ownership. This significant difference is due to differences in the ownership concentration: in India the concentration is much lower:
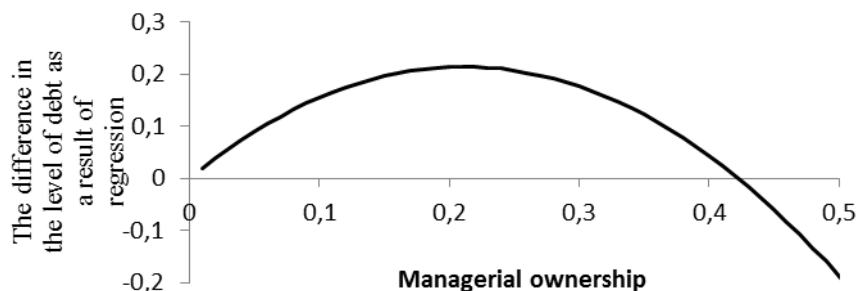
Figure 3: Dependence of the debt level and the managerial shareholding according to the results of the regression analysis for Eastern European companies

The level of debt is less in companies where the CEO chairs the board of directors, it does not reject the hypothesis that such duality reduces the pressure on managers, leading to the decline in the effectiveness of the control and monitoring from the board of director. The hypothesis about the significance of the share of institutional investors' ownership was not rejected: institutional investors carry more qualified monitoring and control, reducing agency costs and increasing debt levels.

For Brazilian companies simultaneous estimation of the level of debt and managerial shareholding gave no significant results. The model with the robust results is following:

Table 6: The regression analysis results for Brazilian companies (model with random effect)

		Wald chi2(4)	**= 604.14**	**Prob > chi2**	**= 0.0000**	
LEV_TM	Coef.	Std. Err.	z	P>|z|	(95% Conf. Interval)	
PPE	0.245084	0.100357	2.44	0.015	0.048387	0.441781
ROA	-1.24189	0.17704	-7.01	0.000	-1.58888	-0.8949
Growth	-0.01394	-0.00446	3.12	0.002	-0.02269	-0.0052
Size	0.038418	0.005846	6.57	0.000	0.02696	0.049877

Most of the variables used in the model as a proxy for agency costs were not significant. Growth opportunities are negatively related to the level of debt, it in line with the hypothesis put forward earlier, but on the basis of single variable's significance it could not be concluded whether or not agency costs have influence on the capital structure decisions of Brazilian companies.

Based on the signs of the significant variables' coefficients (tangibility, growth opportunities and the size) it can be concluded that trade-off theory of capital structure are fair for Brazilian listed companies. However, the negative coefficient of the return on assets (ROA) is not consistent with the trade-off theory: it confirms pecking order theory.

Insignificant results related to agency costs predictions were also obtained for South African companies:

Table 7: The regression analysis results for Brazilian companies (model with random effect)

				LR chi2(6)	**= 27.65**	
				Prob > chi2	**= 0.0001**	
LEV_TM	**Coef.**	**Std. Err.**	**z**	**P>|z|**	**[95% Conf. Interval]**	
ROA	-0.3089	0.127993	-2.41	0.016	-0.55976	-0.05804
PPE	0.952931	0.348704	2.73	0.006	0 .2694839	1.636379
y2008	-0.15847	0.067421	-2.35	0.019	-0.29061	-0.02632
Size	-0.5245	0.126342	-4.15	0.000	-0.77213	-0.27688
cons	4.157454	0.940405	4.42	0.000	2.314294	6.000613

Based on the signs of significant coefficients it can be concluded that trade-off (negative coefficient of the profitability and size), and pecking order theories (positive coefficient on - proxy-level security) are fair for South African companies.

Summarizing the results of hypotheses testing on different markets, it can be concluded that agency costs play an important role in defining the capital structure of Russian and Indian corporations. The majority of proxies for agency costs are not significant for companies in China and South Africa, but, it would be incorrect to make a definite conclusion about the

unimportance of agency costs in determining the capital structure in China, as SG&A expenses volume is a significant determinant of leverage.

The next step of analysis was to determine whether or not the impact of agency costs varies for overleveraged and underleveraged firms. According to results obtained in previous stages of analysis the target level of debt was imputed on the basis of the regression coefficients for each group of companies. Then the separate regressions were calculated for two groups of firms for countries where agency costs were found significant in financing policy determination.

Table 8: The signs of the significant variables' coefficients in the final model

	Russia (LEV_LA)		Eastern Europe (LEV_L)		India (LEV_L)	
	Overleveraged	Underleveraged	Overleveraged	Underleveraged	Overleveraged	Underleveraged
MO	0.500364***		-17.6814***	-17.81442***	6.359675***	3.623954**
MO2	-0.625563***				-13.22852***	-7.726156**
Instit					0.587230***	0.320198**
SGA	-0.001271***	-0.001524***				
BOD					-0.096254**	-0.074277**
Size	-0.029681***		-0.113264***	-0.110220**		
PPE			0.000899***	0.003379**	0.337666***	-0.170032**
Growth	-0.012112**	-0.014545**	1.59e-10***	1.09e-10*		
FCF					0.000048***	8.08e-06**
ROA			-0.000699***		-1.523441**	-0.411718**
Cons	0.530412***	0.199314***	2.656454***	2.642654**		

For Indian and Eastern European companies there are no considerable differences regarding the influence of agency costs proxies on the level of debt. For India dummy variable for companies where CEO is also a chair of Board of Directors is less significant in determining

the capital structure of overleveraged firms. The possible explanation is that high level of debt disciplines the management so the power of CEO is lower. There is difference in the influence of control variable tangibility (sign of PPE for India and significance of Growth and ROA for Eastern Europe).

For Russian companies there are significant differences in the influence of agency costs on the debt levels of over- and underleveraged firms. Firstly, for underleveraged firms managerial ownership has no influence on capital structure decisions. There can be two possible explanations. According to this results agency costs may have greater influence on capital structure decisions of overleveraged firms, so managerial ownership is insignificant and SGA expenses are significant determinants of capital structure. Other possible explanation is that managerial ownership is insignificant because of the low variability of this indicator. Secondly, control variable size is insignificant in the regression of underleveraged firms.

5 CONCLUSION

In this paper we present the results of agency costs and capital structure choice analysis on the data of emerging markets companies within 2000–2010. Our research was based on both linear panal data analysis and simultaneous modeling of leverage choice as well as management ownership share.

Our survey revealed the relevance of agency costs on the capital structure choice in Russia, Eastern Europe, India, but the results are not so obvious for Chinese companies, for South African, Brazilian companies the hypothethis about agency costs significance was not confirmed. The non-linear relationship between financial leverage and management shareholding was proved: as soon as the management shareholding is low its increase leads to the harmonization of interests between shareholders and management, but when the share of management's equity is high, there are almost no incentives for the management to act in the interests of other shareholders. We also revealed that agency costs define long-term debt, but cannot explain short-term debt variables.

The further research could be focused on the extention of the model into the data of other emerging markets, comparison of agency costs' influence on capital structure for large and medium size companies. The question of possible endogeneity should also be thoroughly examined.

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ICT DECISION MAKING SUPPORT – CHOICE OF THE ADEQUATE PROGRAM FOR BUSINESS INTELLIGENCE

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ABSTRACT

In today's turbulent business environment, timely and high-quality business decisions are of vital importance. The effect of decision-making is transferred directly to the existence of a company, its performance and competitiveness. In the past, managers mostly made decisions based on their intuition. Due to different market conditions they then had opportunities to fix some errors made in the decision process. Nowadays the competition in the market is very rigorous and there are little or no opportunities for re-examination. Wrong business decisions are expensive in terms of poor results and can even ruin a company. Therefore, it is extremely important that the management is aware of various methods and techniques that support complex business decisions. In addition to models for decision-making processes, software solutions, also called decision support systems, are used to support management's work. One example is a program SidX (Simple Decision Expert, Pro Softlab, Slovenia), which offers a very simple user interface especially suitable for use in strategic decision-making situations. This paper deals with display methods for selecting the most appropriate software solution for business intelligence in a given company by using a decision support system SidX. The basic contribution to the business profession, presented in the paper, is the methodological approach to complex decision making.

Keywords: A quality decision, Business intelligence, Decision making, Decision support systems, Expert modelling

1 INTRODUCTION

The paper is based on a case study of an enterprise (Kostanjšek, 2012). ERP system in this enterprise daily creates a great amount of data and information, which are used as input for business intelligence (Figure 1). User requirements are constantly evolving and business intelligence system (BI) must continuously follow these requirements.

In general, we can say that a business intelligence system in an enterprise includes various tools and techniques that assist business users in making decisions and achieving their goals. Simplified model of BI is represented in Figure 2.

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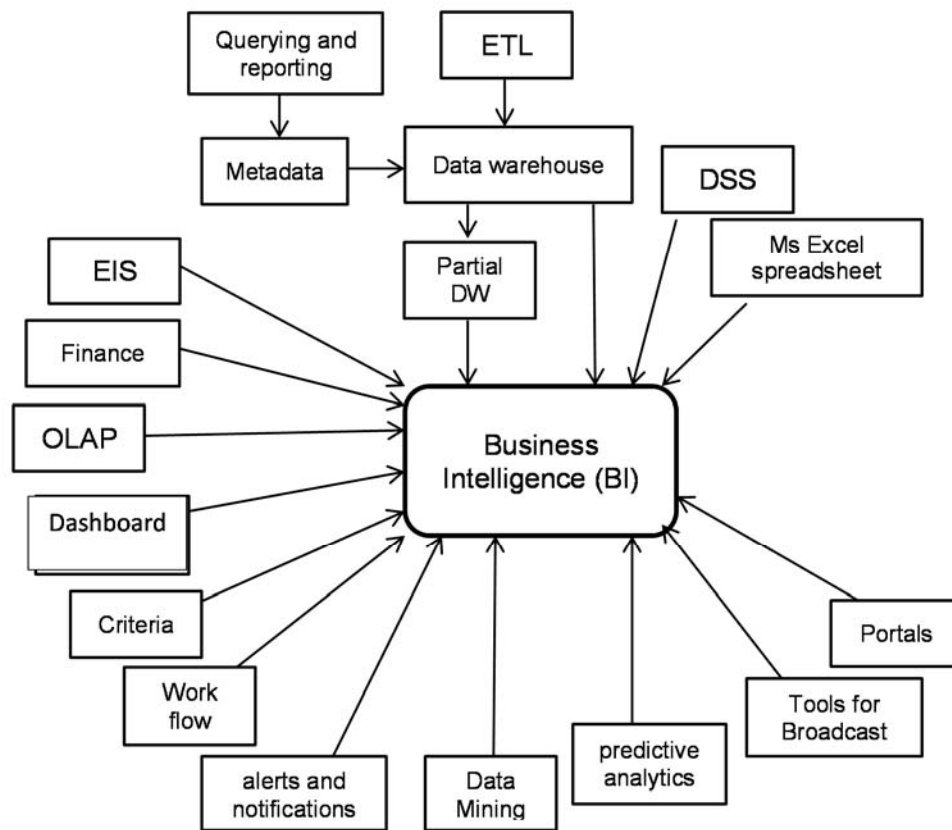
Figure 1: The System of Business Intelligence (Turban et al., 2011)
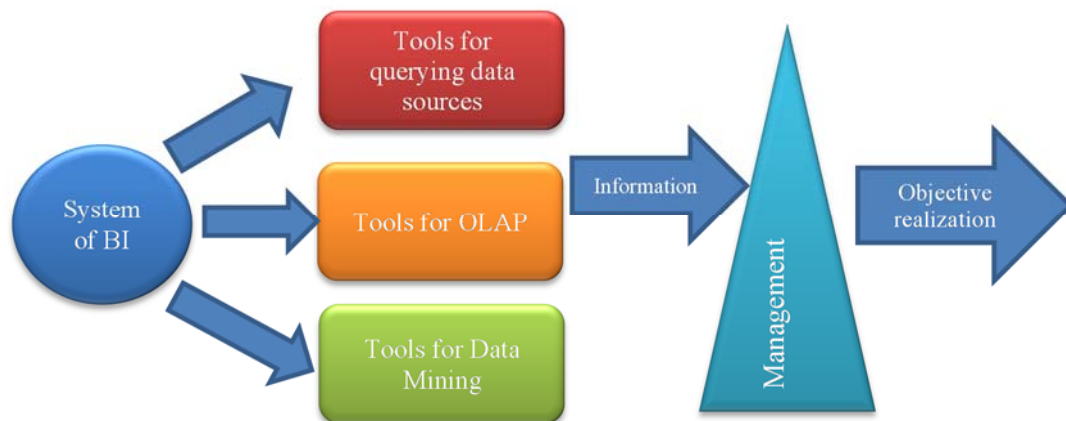
Figure 2: The simplified model of BI (RCL, 2012)

Users in each and every company have different business needs that vary depending on: their level (operational, tactical or strategic), the frequency of required information (regular, occasional, unique, etc...) and the mode of transmission of information (automatic or on request). Specific definitions of methods and processes or ICT solutions for business intelligence in general do not exist. Only the sole purpose of business intelligence is uniform and that is – to produce relevant information, on time and of high value (Scheps, 2008). The

objectives of BI are therefore: to connect and integrate various business information systems, their data sources and methods for information processing in a unified and centralized system of business intelligence, optimized for management (Bobek, 2007). These objectives can be achieved by so-called ETL (Extract, Transform and Load) procedure. This is a process of cleaning, transforming and loading the data from operational databases into a single data warehouse (Figure 3).
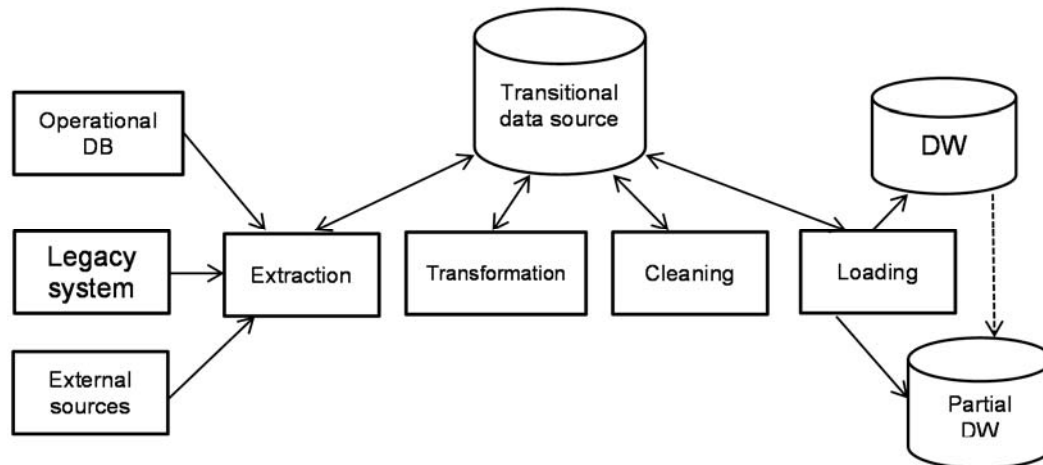
Figure 3: ETL process (Turban et al., 2010)

In order to create reports from the data warehouse, tools based on data mining and OLAP system are needed.

To summarize: no standardized ICT solutions exist for business reporting. Companies need to build their own systems that will meet their user's and especially their management's needs.

2   ANALYSIS OF BUSINESS INTELLIGENCE IN OBSERVED ENTERPRISE

Business strategy of the observed enterprise is based on their desire to become the leader in the market. Their standard products are: various high security personal documents, lottery games tickets, a variety of printed labels, computer forms, promotional and advertising materials, flexible packaging, etc. In the beginning of 2007, the company implemented a new business information system - Hagen OA (EFI). American company EFI develops IT solutions for the printing industry. Later versions of the system are called Monarch. Information system Monarch uses the less known database Progress (http://www.progress.com/en/index.html).

Here are some examples of business reports that are generated from the information system:
- Accounts receivable reports (sales by market/country/product class, top customers, cash flow analysis etc.)
- Account payable reports (obligation to suppliers)
- Inventory Control reports (inventory items / materials, finished goods, inventory by warehouse etc.)
- Order fulfilments reports (purchase orders, shipping orders, shipment reports)
- Job Management reports (work in process, product cost sheets, work jobs, employee analysis reports etc.)

To display reports of business intelligence nature, the company uses Microsoft Excel. This is a very common and useful tool, but it is not primarily intended for business intelligence purposes because of the following limitations:

- Limited number of rows (depending on the version of MS Excel);
- Limited display of filter results;
- Slow refresh rate for new data;
- Slow file management for large files with multiple sheets;
- Some files are too large to send by e-mail.

The following is expected from new business intelligence system:

- The ability to display more than one million rows of data;
- Faster file open and refresh operations;
- The ability to display reports in tablet computers and smart phones;
- Distribution of quality information to the relevant users;
- The possibility of using dashboards.

Since the market offers a large variety of BI software solutions, we have to work systematically. First, we identified criteria that are important in choosing the right tools. Using the defined criteria we created an expert decision model in the program SidX. On the basis of good references we selected a few software tools from the market that seemed appropriate. We have included some relevant researches (Gartner Group and BARC BI Survey) and on the basis of their assessments evaluated our criteria. Expert model in SidX then suggested the best software solution for business intelligence according to our needs and requirements.

2.1 Introduction of the program SidX

Sidx (Simple Decision Expert) is based on the Decaid method (Brelih and Rajkovič 2008) but is upgraded in graphics and analyses. It is adapted for contemporary computer environment and offers a set of new functionalities and a user-friendly interface. The prototype was developed in Microsoft Visual Studio NET 2005 and is designed for Microsoft Windows environment. The program was developed by the Slovenian enterprise Prosoftlab (http://www.prosoftlab.com).

2.2 The method of collecting data

In this study we wanted to include the more established and well known software solutions for business intelligence. We used publicly available results of research organizations like BARC (Business Application Research Centre) and Gartner Research (Gartner surveys) from the beginning of the year 2012. Gartner's Magic Quadrant (Figure 4) shows the providers of business intelligence tools, which are classified based on the completeness of vision and the ability to execute. From the entire set of providers we chose the following companies: QlikTech, SAP, IBM, MicroStrategy and Tableau.

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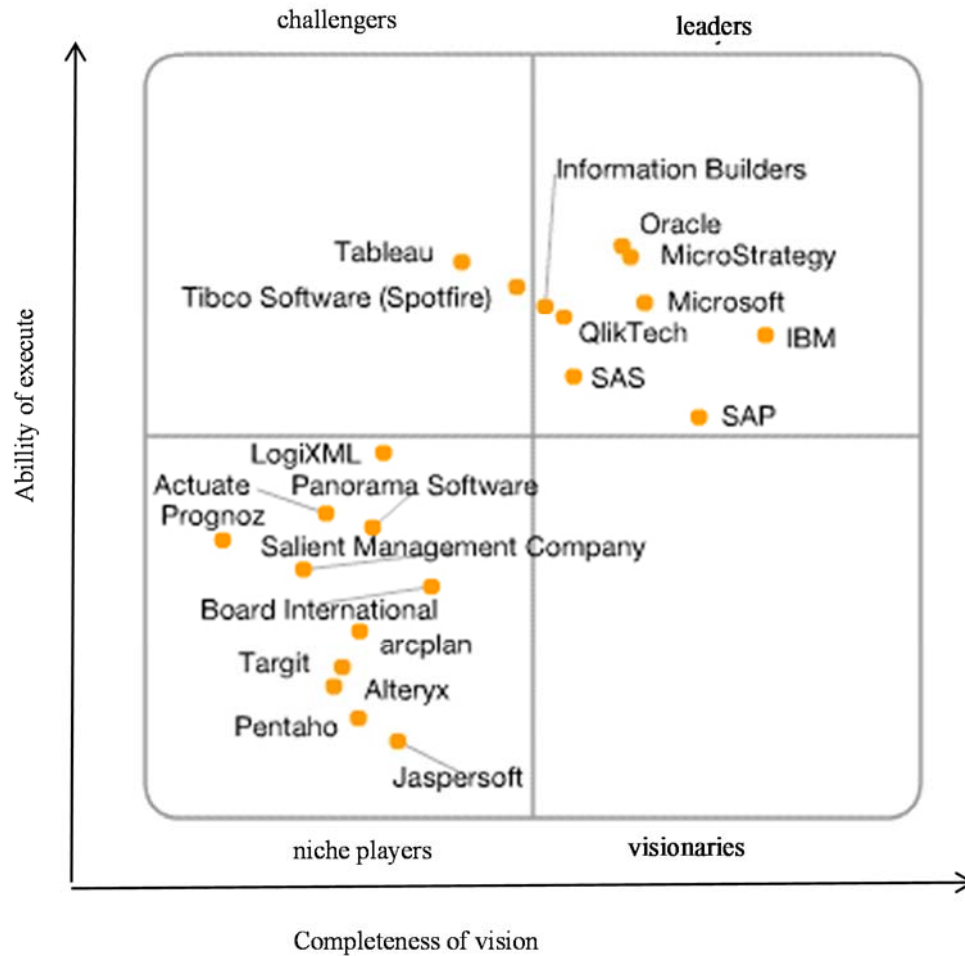
Figure 3: Gartner Magic Quadrant (Gartner, 2012)

2.3   The criteria of assessment

Analysis of needs in the observed company shows that we have to choose a tool for Business Intelligence, which respects the following criteria:

- Reporting (completeness of reports, distribution to mobile devices, publishing to company intranet, automatic data refreshing);
- Quality of dashboards that display complex information, using a variety of graphical methods;
- Ad hoc queries, which allow users to create their own custom reports and analyses;
- Microsoft Office integration;
- Collaboration (ability for users to exchange business reports);
- Support for OLAP that allows users to quickly analyse and manipulate business data. In this case, there is a dedicated database, which enables users to make "what if" models and analyses;
- Support for interactive visualization that allows users to display multidimensional data;
- Predictive modelling and data mining. This allows users to search for new rules in data and to find new variables. It also provides the future values of these variables;
- The time needed to implement the program for business intelligence. This is the time from the purchase to actual use. Shorter time means lower costs;
- Satisfaction by customers, who already used the tools.

- Quality of tools. It is the customer's assessment of the problems they had with the tool (non-functioning, additional costs);
- Total cost of ownership (TCO). This criterion covers the entire costs of purchasing and owning the licensed software;
- Purchasing additional user licenses. This is also an indicator of satisfaction of customers who want to extend the use of the system to new users with additional licenses.

2.4 The process of assessment

Values for all criteria were obtained from two studies (Gartner Research 2011 and BARC BI Survey 10, 2011), which use different measurement scales. That is why we have to standardize all values on a uniform length of 100th. Table 1 shows corrected values for five selected software providers.

Table 1: Evaluation of Business Intelligence tool providers (Gartner, 2011; BARC BI Survey 10 2011)

Criteria	QlikTech	SAP Business-Objects	IBM Cognos	Micro-Strategy	Tableau
1. Reporting	79	82	87	89	90
2. Dashboards	90	75	78	87	92
3. Ad hoc queries	84	80	83	87	88
4. MS Office Integration	80	73	73	82	82
5. Collaboration	77	72	69	80	85
6. OLAP-analysis	87	68	80	87	88
7. Interactive Visualization	90	74	70	81	94
8. Predictive modelling and Data Mining	76	60	71	76	79
9. Implementation	47	9	9	15	47
10. Adequacy of tools	35	28	27	33	35
11. Quality of tools	48	23	13	38	48
12. Total cost of ownership	37	20	63	30	87
13. Additional licenses	47	35	32	40	48

2.5 Decision model and the choice of the adequate program for business intelligence

Decision model was created in the SidX based on selected criteria from Chapter 2.3. SidX user interface uses a wizard, which guides the user step by step in order to make a decision model. At the beginning, it is necessary to determine the number of options/variants from which we can choose. In our case, this means five providers of business intelligence tools. In the next step we have to enter the criteria, which used to assess these variants. It is very important that we determine the appropriate criteria weights (impact) and measurement scales (Figure 5) according to our needs and desires. The final step is evaluation of variants according to the criteria.

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Figure 5: Evaluation criteria and their weights

3 THE RESULTS OF DECISION PROCESS IN SidX

On the market there are a lot of providers for business intelligence software solutions. Each organization has to decide which is the most appropriate solution for them, according to their unique requirements and needs. Based on the results of our decision-making process (Figure 6), it was suggested that the best choice for the observed enterprise is the tool provided by the company Tableau Software.

Although the decision model finds and suggests the optimal solution, it is still only a proposal which can help users make a certain decision. The final decision is still in the hands of the users.

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Variants	Evaluation
QlikTech	67,92558 točke
SAP BusinessObjects	55,43629 točke
IBM Cognos	60,50153 točke
MicroStrategy	64,86137 točke
Tableau	76,13151 točke

Figure 6: The result of the evaluation of selected provider's tools for BI

4 CONCLUSION

In the presented company, the provider Tableau was chosen as the best BI solution, because it was the closest match for all the requirements.

After we have chosen the best provider for BI tools, the next question appeared: can the proposed BI system provide better support in business decision making in our company? Given the fact that the tool largely met selected criteria, we can estimate that its use can eliminate many initially introduced problems. However, the actual quality of the BI system will not be clear, until the software is implemented and tested on the real company data in real time. Improved business intelligence can lead to faster business decisions of higher quality. In any case, with the new BI tool, a greater competitive advantage in the market is also expected.

The use of BI tools is associated with the desire to make high quality information-based business decisions. Business intelligence tools assist in the management of data and the presentation of information to end users in the right way and at the right time. They play a key role in the quality of business decisions.

This paper emphasizes the importance of the choice of software tools for business intelligence. It is important that the company defines what to expect from such a tool, and to use appropriate methods and techniques to assist in the decision. We have presented an expert decision model for selecting the best provider of business intelligence tool. Such a model presents a knowledge base and can be used in solving similar problems in the future.

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ASSESSMENT OF THE ORGANIZATIONAL CULTURE OF COMPANIES BY BUSINESS-SCHOOL STUDENTS IN CROATIA

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ABSTRACT
Concept of organizational culture has not been investigated broadly in Croatia. This paper focuses on assessment of organizational culture by business-students in Croatia. The purpose of this research is to assess the organizational culture in Croatia by business-students in neutral surrounding and to assess different aspects of organizational cultures in Croatia. We approached the topic of organizational culture from theoretical and empirical perspective. The paper identifies some of the most relevant factors and dimensions of organizational culture. The main method used in our empirical research is Denison model of organizational culture. Through this model, authors assessed the organizational culture through twelve dimension indices and four cultural traits of organizations: involvement, consistency, adaptability and mission. It seeks to show that there will be no differences in perception of organizational culture according to management role and business areas and company sector. This paper demonstrates assessment during Economic crisis in Croatia and certainly gives an overview how employed business-school students perceive organizational culture according to world famous model of questioning organizational culture.

Keywords: Corporate social responsibility, Denison model, Ethics, Management role, Organizational culture

1 INTRODUCTION
Organizational culture usually shows company efficiency as well as company functions. More successful enterprises differ from the less successful ones in the investments to creating their culture according to the way of firm's development. Opposite to that, it is often a case that organizational culture is taken for granted and companies often do not think about their culture. Croatian companies are often not aware of those internal settings. This paper will present theoretical and empirical approach to the organizational culture. It will explain the organizational culture through a cross-section of different models and applying one of them. In order to better identify the organizational culture we will clarify the definition and structure of the organization and why is organizational culture a key figure inside the organization work will show and explain some examples of organizational culture at home and abroad. This paper will use the latest research work with special emphasis on Denison model of organizational culture. The primary purpose of this study is to examine how business-school students assess the organizational culture in Croatia during the economic crisis through the Denison model of organizational culture.

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According to described aim and contribution, following hypotheses want to show that "There will be no differences in perceiving organizational culture in relation to managerial role of employed business-school students". We assume that there will be no differences in perceiving organizational culture among managerial roles in organizational culture dimensions. Though there might be the slight difference of perception due to employees and managerial view is not alike. The second hypothesis is that "Business areas of Management, Finance and Insurance will have better teamwork orientation then public Service and Education". We can presume that teamwork predominates among highly-skilled jobs because they have higher level of autonomy. The final third hypothesis is "There will be no differences in perceiving organizational culture among employed business-school students according to company sector". We can presume that company sector will not have influence on perception of organizational culture. We might expect some differences if candidates will tend to promote their department.

For the purpose of this research, authors conducted a research in which a planned sample was 300 and we achieved that goal. Sample was collected in three branches of University A in various cities. This sample was sufficient to make general conclusion for the research. Business-school students were chosen according to their employment status. Both undergraduate and graduate students were taken into consideration according to their employment status. Sample did not have age limitation. The sample was structured according to management role/position, working experience, business areas and business sector.

The instrument used for the purpose of this research was Denison questionnaire based on Denison model of organizational culture. Denison model of organizational culture comprises a total of 60 statements such as " Most employees are very dedicated to work", "There is a clear way of leadership and clear management methods", "Management focused on long-term goals " etc. Denison questionnaire was adapted according to hypotheses. The model measures four essential traits of all organizations: Mission, Adaptability, Involvement and Consistency. Each of these traits consists of three indices. There is a total of 12 indices. Responses of the chosen will be measured on a 5-point Likert scale that was ranged from 1 ("strongly disagree") to 5 ("strongly agree"). Business areas and sectors were listed according to Croatian National classification.

Data was collected through questionnaire. Questionnaire with full written and verbal instructions was submitted in classrooms of University A. Candidates were introduced in detail with the questionnaire and the aim of the research. Instructions in the article are printed on the front page of the questionnaire. Participants were told that the data provided exclusively used for scientific purposes. Completing the questionnaire took about 20 minutes in average. It was explained that filling in the questionnaire is voluntary and anonymous. It was also being explained that results of the research will be used only for the research purpose. Students placed the questionnaire in the empty box placed in the classroom. Questionnaires were archived. Candidates did not have the time limit for the questionnaire. Data processing: Data is presented and analyzed using computer program for statistical analysis SPSS V 18.0.

2 DEFINITION OF ORGANIZATIONAL CULTURE

Culture is something that surrounds us all the time, set of structures, routines, rules and norms that guide and constrain our behavior. Culture has many meanings and as a concept has had a long history. According to Edgar Schein, social psychologist, culture is defined as an example

of group that has learned shared basic assumptions and solved its problems externally and internally Edgar Schein sees that as something that considered valid and worked well and it can be taught to new members as an example how to perceive, think, and feel in relation to possible problems (Schein, 1992). This description sounds difficult at first, but it highlights several important things: culture belongs to a group, culture is learned and culture concerns critical assumptions shaping how group members perceive, think and feel about things. Charles Handy identifies four types of culture; the power culture, the role culture, the task culture and the person culture. The power culture has a power source which exercises control while in role culture that is controlled by procedures and rules. The task culture relies more on expert power and letting the right people to do their job. This type of culture promotes teamwork. In the person culture the individual has a key role and organization exists in order to assist and serve the individual (Armstrong and Stephens, 2005). Another definition is that organizational culture is a cognitive framework that is consisted of attitudes, different behavioral norms and various expectations shared by organizational members (Greenberg and Baron, 2003). Most definitions recognize the importance of shared norms and values that direct employees' behavior. Organizational culture is a complex phenomenon. Each organization has a unique way of doing things. Culture to an organization is insubstantial force and it has several roles in organizations such as sense of identity, commitment among employees, has purpose of clarifying and setting certain standards of behavior (Singh, 2009).

Sense of identity means that people are able to join together when there is clear what are the shared perception and vision inside the company. Sometimes it can be difficult for employees to feel that they are part of a company involved in the entire organization's work therefore it is important for culture to generate commitment among employees. Culture should guide employees' words and performances, making it clear what they should do or how to act in a given situation. In that sense it would unquestionably give stability to behavior (Singh, 2009).

2.1 Findings of organizational culture in Croatia's companies

Croatia made a significant economic advance and had fast growing economy. We can define Croatia as a rather small market and in last years it strives to conquer the foreign market. According to the Croatian Chamber of Economy, an institution that promotes and represents Croatian economy, Croatia needs restructuring of companies in order to attract foreign investors. According to Antoljak, general director of Sensa Consulting, there many good examples of corporate culture in the world from which one can learn a lot. Most successful Croatian companies still rely on outdated model of a corporate culture that is based more on hierarchical principles guided the organization of an authoritative work of managers or owners, very few of them have a flexible model of corporate culture. Successful Croatian companies continue to rely on a hierarchical organization led but believe that promote employee development (Antoljak, 2011). Every company has its own organizational culture; in some companies it is very transparent while in others it is underlying.

2.2 Denison model of organizational culture

Instrument which will be used for the purpose of this thesis is Denison model (Chart 1) of organizational culture developed by Daniel R. Denison and William S. Neale which have been used by over 5000 organizations worldwide Model has been developed after twenty years of research throughout thousand companies. This model is based on four cultural traits of organization: involvement, consistency, adaptability, and mission (Teegarden et al., 2011). The model is the basis for the Organizational Culture Survey and the Leadership Development Survey. As mentioned above, model will focus on four critical spots, degree to

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which employees are clear about their vision, goal; degree to which they think that organization has values, systems and processes that support vision and goals and whether employees are engaged and involved in helping move the organization forward (http://www.denisonconsulting.com/home/terms.aspx).
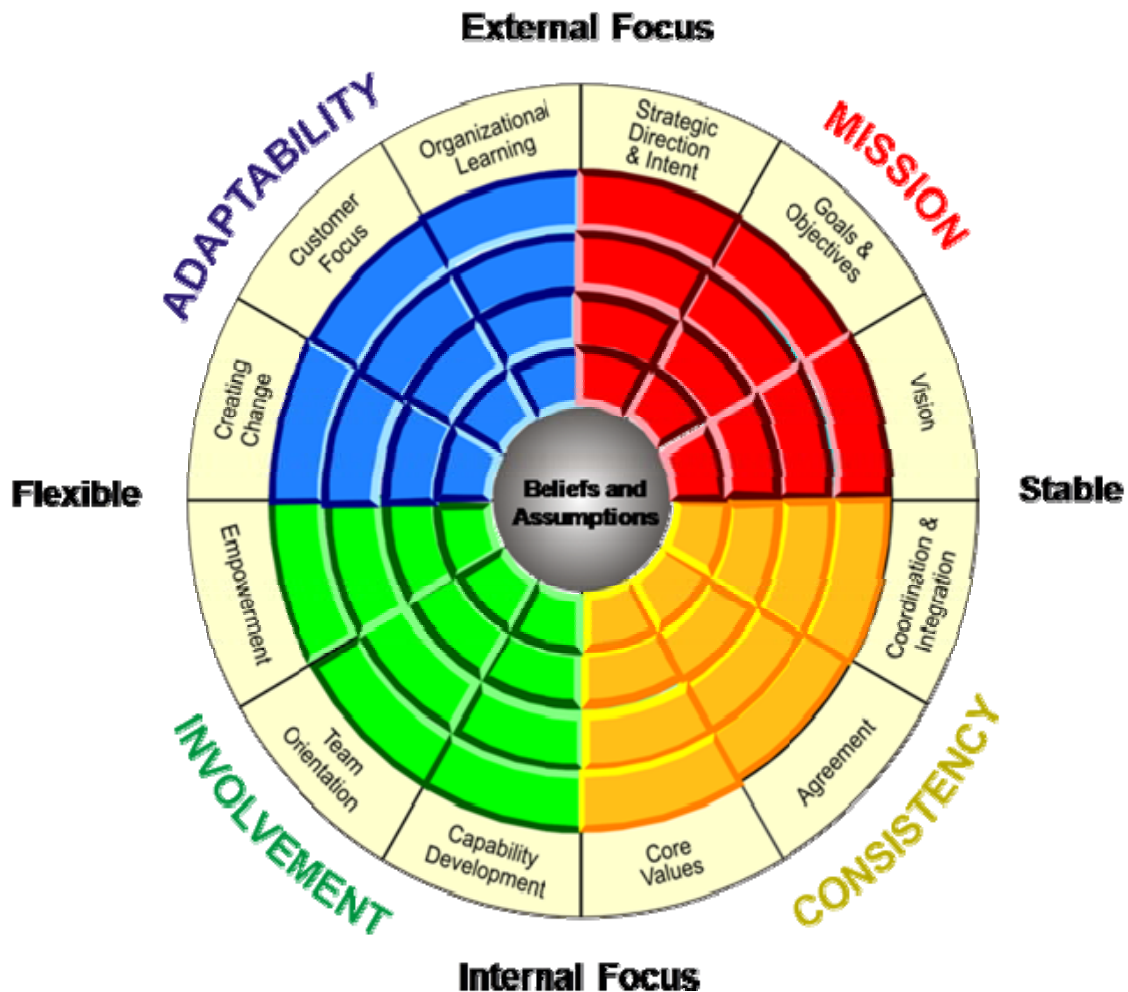
Chart 1: Denison model by its components
(http://www.denisonconsulting.com/advantage/researchModel/model.aspx)

2.2.1 Involvement

In this part of the model we observe whether members are committed to their work, and feel a strong sense of ownership. People at all levels feel that they have at least some input into decisions that will influence their work and feel that their work is directly connected to the goals of the organization (Dawson, 2010). This allows more informal control system and more voluntary and implicit control system. This part of the model consists of: empowerment, team orientation and capability development (Dawson, 2010). Empowerment represents employee's freedom to give inputs and make decisions on their own, team orientation means that employees support one another in their ideas and that this support results in accomplishing company's goals and lastly capability development which refers to employee's exposure to new tasks and given responsibilities. Those exposures are often through training and coaching

2.2.2 Consistency

Consistency provides a central source of integration, coordination and control. Consistent organizations have very committed employees, key central values, specific methods of doing business and predisposition to make clear which are the company rules; in a way that employees know what they can do and what they cannot. Consistency is a base ground for well-built culture based on a shared system of beliefs, values and symbols that are widely understood by members of an organization (Dawson, 2010). Consistency helps employees to react in a predictable way when they found themselves in unfamiliar situation. Consistency has three indices: core values, agreement and coordination and integration (C. Dawson, 2010). Core values have important role of guiding employees and leaders, following that core values are guidelines for them to make consistent decisions and behave according to them. Employees often found them in a situation when they need to have constructive dialogue and be able t achieve agreement and that is what agreement is, ability of every employee t achieve one when problems occur. Coordination and integration means how employees comprehend their work and impacts it has on others and turn round.

2.2.3 Adaptability

Three aspects of adaptability impact an organization's effectiveness:
- The ability to perceive and respond to the external environment; refers to a focus on customer;
- The ability to respond to internal customers, regardless of level, department or function
- The capacity to restructure and re-institutionalize a set of behaviours and processes that allow the organization to adapt. Without this ability to implement adaptive response, an organization cannot be effective.

Adaptability has three indices as well and they are creating change, customer focus and organizational learning. Creating changes is key issue in today's business and successful organizations are willing to accept new ideas and they have open approach to them. Customer focus refers to looking and creating new ways in order to meet customer expectations. This index has focus on whether employees recognize that they need to put customer as their priority. Organizational learning looks at whether employees are able to learn from their failures and turn failure into success (Dawson, 2010).

2.2.4 Mission

Every organization should have its own mission so employees know what the purpose of their work is, we looked at three indices: whether strategic direction and intent of the company is defined, are there goals and objectives clearly defined and whether mission creates shared vision (Dawson, 2010). Vision should be a guide t every employee, but it is often not clear enough, goals and objectives make employees more secure of criteria of performed work and equality in a way that everyone know what the goals are.

These four traits will help us in detecting student's opinion and view about organizational culture in companies where they work. We decided to choose Denison model of organizational culture because it is business oriented and applicable to all industries. Throughout our research and additional readings, we have found out that Denison model of organizational culture worked with organizations all over the world. Some of them are University of California, Deutsche Bank, 3M, and Henkel. We saw this model as something that Croatian companies could easily use and use it as a tool to promote corporate strategy and business interventions. Furthermore, Denison is a world famous model and been used by

companies all over the world, but not in Croatia. We used the opportunity to make Croatian translation and create new opportunity for Croatian companies. Denison model has been already translated into most of the major world languages.

3   RESULTS OF EMPIRILAC RESEARCH

Planned sample was 300 and we achieved that goal. Sample was collected in three branches of University A in various cities. This sample was sufficient to make general conclusion for the research. Business-school students were chosen according to their employment status. Both undergraduate and graduate students were taken into consideration according to their employment status. Sample did not have age limitation. The sample was structured according to gender, role/position, working experience, business areas and business sector. There was 133 (44, 3%) male subjects and 167 (55,7%) female candidates. We had 96 (32%) candidates on managerial positions and 194 (67%) on non managerial positions. There was 161 business-school students who work 1 up to 5 years (53,7%) and 139 who work 2 over 5 years (46,3%). Business areas were chosen according to Croatian National classification and were divided into following categories: Construction, Manufacturing and Transport, Tourism and Entertainment, Public Service and Education, Management, Finance and Insurance and Informatics and telecommunication.

- − Manufacturing and Transportation (N = 97, 32,3%)
- − Public Service and Education (N = 81, 2,3%)
- − Management, Finance and Insurance (N=78, 26%)

In this research, due to small number of participants, we did not include participants from:
- − Construction (N = 16)
- − Tourism and Entertainment (N = 12)
- − Informatics and Telecommunication (N = 7)

Data is presented and analyzed using computer program for statistical analysis SPSS V 18.0 (Statistical package for the social sciences). We will show basic statistical parameters of variables which were included for the purpose of this research and variance analysis in order to see structure of differences between different groups according to independent variables. We will also identify certain aspects of organizational structure that contribute in differentiating target groups. In Table 1 we will present characteristics of research participants.

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Table 1: Characteristics of research participants (Analysis of the authors)

		N	%
ROLE/POSITION	Managerial	96	32,0
	Non managerial	194	67,0
BUSINESS AREAS	Construction	16	5,3
	Manufacturing and Transport	97	32,3
	Tourism and Entertainment	12	4,0
	Public Service and Education	81	27,0
	Informatics and Telecommunications	7	2,3
SECTOR	Marketing and Sales	103	34,3
	Finance and Accounting	67	22,3
	Human Resources and Administration	64	21,3
	Informatics and Telecommunications	20	6,7
	Company management	14	4,7

Denison model is based around twelve organizational culture indices and four key traits – mission, adaptability, involvement and consistency. In Table 2 and Table 3 author will display twelve organizational culture indices and four key traits of Denison model of organizational culture for whole sample (N=300). In Table 2 each dimension has five items, for example empowerment is calculated by adding first five questions. Minimum and maximum represent average that every respondent answered for specific index (as mentioned above, they were answering on Lickert scale, 1("strongly disagree") to 5("strongly agree"). Results of our research showed that in the mean respondents were neutral. Mean ranged from 3,06 to 3,27. We can conclude that respondents did not have strong attitudes on any indices and they were neither in favor or opposed to it. These results were opposite to our expectations and we will include it in the discussion part of the thesis. We assumed that there will be higher differences in perception of specific dimensions of organizational culture. Highest arithmetic mean has indices Core-Values (M=3,27; SD=0,69), and lowest is for Vision (M=3, 06; SD=0,66). Core values means that respondents share a set of values which furthermore create a sense of identity and clear expectations. Vision corresponds to respondents' vision of organizational future and their perception of guidance and direction within the organization.

Table 2: Twelve indices of organizational culture, their arithmetic mean, minimum, maximum and standard deviation (N=300) (Analysis of the authors)

ORGANZATIONAL CULTURE DIMENSIONS INDICES	N	Minimum	Maximum	Mean	SD
Empowerment	300	1,20	4,60	3,07	,61588
Team_Orientation	300	1,40	5,00	3,08	,73085
Capability_Development	300	1,00	5,00	3,09	,70207
Core_Values	300	1,60	5,00	3,27	,69287
Agreement	300	1,20	4,80	3,10	,60155
Coordination_and_Integration	300	1,40	4,80	3,00	,58805
Creating_Change	300	1,00	5,00	3,13	,61225
Customer_Focus	300	1,00	5,00	3,19	,66168
Organizational_Learning	300	1,00	4,80	3,11	,67092
Strategic_Direction_and_Intent	300	1,00	5,00	3,18	,75309
Goals_and_Objectives	300	1,00	5,00	3,17	,73276
Vision	300	1,00	5,00	3,06	,66810

Chart 2 shows more clearly twelve indices of organizational culture and confirms results which showed that all employed business-school students had similar opinion towards twelve indices of organizational culture.
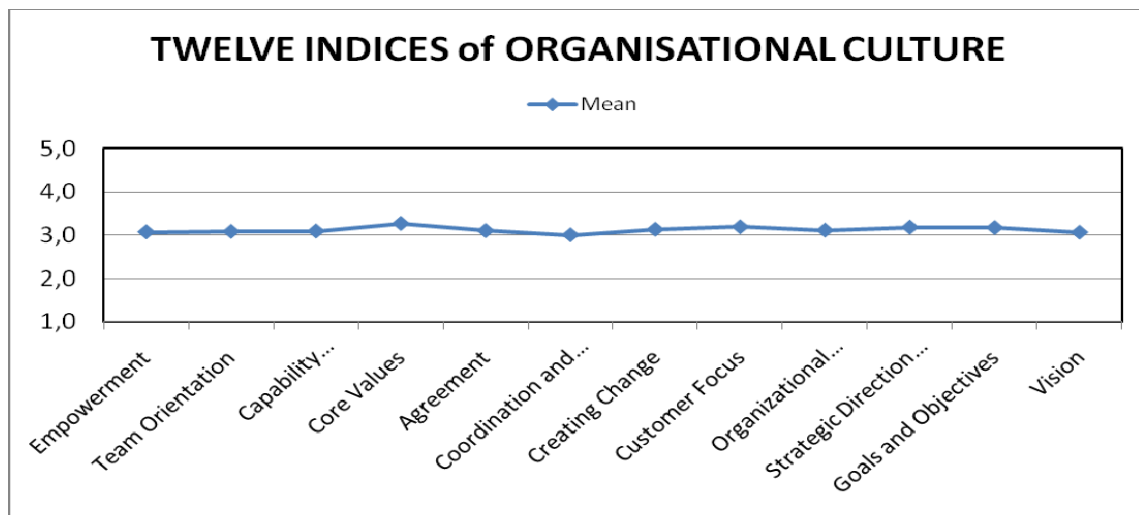
Chart 2: Twelve Indices of organizational culture – Arithmetic Means (N=300) (*Analysis of the authors)*

In Table 2 we looked at twelve organizational culture indices. In following table (Table 3) we will look at four traits of organizational culture for whole sample (N=300). Every trait has three items. Therefore minimum and maximum are calculated by adding those three items for every trait. For example Involvement is calculated by adding empowerment, team orientation and capability development. Minimum and maximum represent average that every respondent answered for specific trait (as mentioned above, they were answering on Lickert scale, 1

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("strongly disagree") to 5 ("strongly agree"). Results showed that Adaptability (M=3,14; SD=0,54) and Mission (M=3,14; SD=0,60) have identical arithmetic means. Adaptability looks at whether organization has the initiative to translate the demands of the organizational environment into action. In this four dimensional trait representation of organizational culture we can also see that candidates showed neutral attitude towards all four traits of organizational culture. Those results could be explained with the fact that some questions of candidates were inundated with desire not to discover 'their real opinion' so they were rather neutral. Even though the questionnaire was anonymous, it is possible that a certain number of candidates did not perceive it that way and that did not answer honestly. We assumed that there will be higher differences in perception of specific traits of organizational culture therefore we will continue interpreting findings in the discussion part.

Table 3: Four Traits of organizational culture - Arithmetic means (N=300) (Analysis of the authors)

ORGANZATIONAL CULTURE TRAITS	N	Min.	Max.	Mean	SD
Involvement	300	1,60	4,60	3,08	,55646
Consistency	300	1,53	4,60	3,12	,49110
Adaptability	300	1,00	4,87	3,14	,54908
Mission	300	1,00	4,87	3,14	,60419

Chart 3 shows more clearly four traits of organizational culture and confirms results which showed that there is no difference in attitudes of employed business-school students towards four traits of organizational culture.
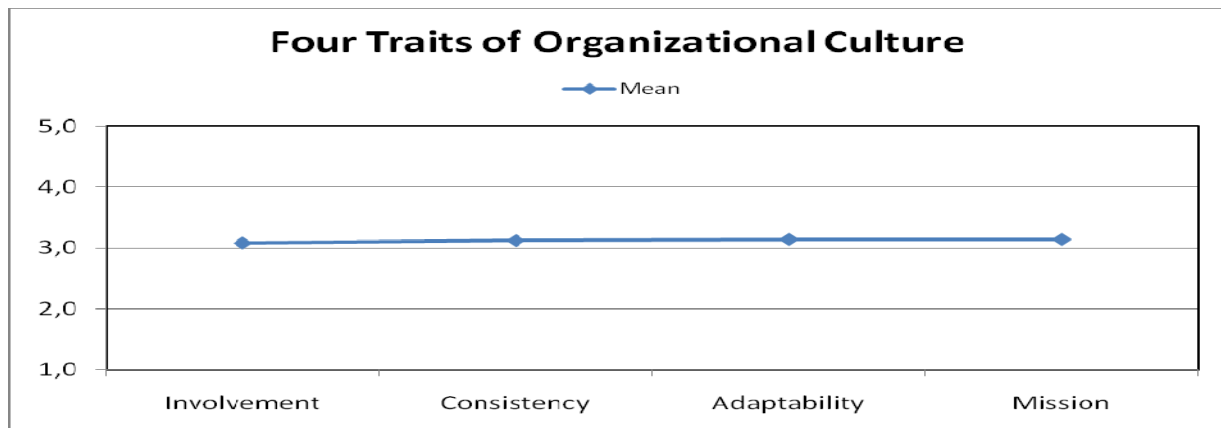
Chart 3: Four Traits of organizational culture - Arithmetic means (N=300)(Analysis of the authors)

In order to check differences in candidate's perception towards organizational culture according to managerial role, gender, work experience, business areas and business sector, we tested statistical difference of their arithmetic means and for that purpose we used t-test for all 12 indices. Results are presented in the following tables.

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Table 4: Twelve Indices of organizational culture – managerial and non managerial roles
(Analysis of the authors)

ORGANZATIONAL CULTURE INDICES	ROLE				t-test
	Managerial (N=96)		Non managerial (N=194)		
	Mean	SD	Mean	SD	
Empowerment	3,18	,557	3,03	,628	1,990*
Team Orientation	3,15	,756	3,07	,713	0,903
Capability Development	3,23	,637	3,05	,712	2,135*
Core Values	3,25	,723	3,29	,684	-0,444
Agreement	3,21	,569	3,06	,599	2,033*
Coordination and Integration	**3,17**	,577	**2,94**	,570	**3,171****
Creating Change	3,22	,584	3,10	,616	1,599
Customer Focus	3,26	,650	3,17	,659	1,053
Organizational Learning	3,25	,653	3,05	,678	2,447*
Strategic Direction and Intent	3,33	,702	3,13	,763	2,180*
Goals and Objectives	3,23	,731	3,16	,723	0,709
Vision	3,12	,606	3,05	,687	0,864

*Remark of meanings: ** p<0, 01, * p<0, 05*

In Table 4 author researched, through twelve organizational culture indices of Denison model of organizational culture, differences according to different managerial roles and in Table 5 among four traits of organizational culture. Table 4 displays results according to managerial role through twelve organizational culture indices of Denison model of organizational culture. Managerial role was divided into two categories; managerial and non managerial. As we can see in the table, there were 96 managerial roles and 194 non managerial roles. According to this research we can see that Coordination and Integration (t=3,17; p<0,01) is the only dimension that is statistically significant with the risk less than one percent. According to this research there is statistical significance of less than one percent risk between managerial and non managerial roles. Empowerment (t=1,99; p<0,05), Capability Development (t=2,13; p<0,05), Agreement (t=2,03; p<0,05), Organizational Learning (t=2,44; p<0,05) and Strategic Direction (t-test=2,180 p<0,05) are statistically significant with less than five percent of the risk. From presented results and questions presented to respondents, we can conclude that managers are better in approach to doing business, they are more consistent and predictable, it is easier for them to coordinate projects across different parts of the organization. These results were expected because managerial role often has more authority to coordinate projects.

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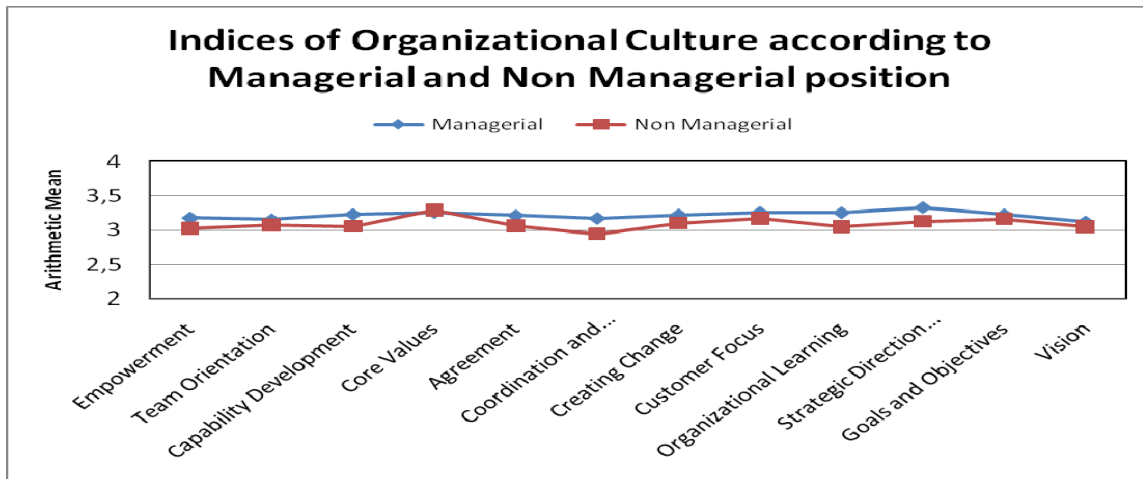
*Chart 4: Twelve Indices of organizational culture – managerial and non managerial roles
(Analysis of the authors)*

From graphic display we can see that there is a difference between managerial and non managerial roles. Managerial role shows a trend towards higher average values. As it was already seen form the results in Table 4. it shows a statistically significant difference in the dimension Coordination and integration. Highest overlapping exists on dimension Core Values. Which means that both managerial and nom managerial roles have similar opinion about existence of characteristic management style and a distinct set of management practices and set of clear and consistent values that governs the way they do business. The values obtained are discussed and given according to four traits of organizational culture and shown in the following Table 5.

*Table 5: Four Traits of organizational culture for managerial and non managerial role
(Analysis of the authors)*

ORGANZATIONAL CULTURE TRAITS	ROLE				t-test
	Managerial (N=96)		Non managerial (N=194)		
	Mean	SD	Mean	SD	
Involvement	3,19	,516	3,05	,556	2,010*
Consistency	3,21	,498	3,10	,475	1,869
Adaptability	3,24	,534	3,11	,550	2,018*
Mission	3,23	,575	3,11	,604	1,518

*Remark of meanings: ** p<0, 01, * p<0, 05*

In Table 4 author researched managerial roles through twelve organizational culture indices of Denison model of organizational culture and in Table 5 author will look at four traits of organizational culture. According to results in Table 5 there is statistical significance less than five percent in Involvement(t-=2,01; p<0,05) and Adaptability (t=2,01; p<0,05) we can see from results that managers scored higher mean on involvement(M=3,19) and adaptability (M=3,24).

We displayed graphical result as well in Chart 5. We can conclude that managers have higher mean in empowerment, team orientation and capability development, creating change,

customer focus and organizational learning. This was expected because managerial roles tend to have ability to work in teams, more authority to crate change and influence to customers.
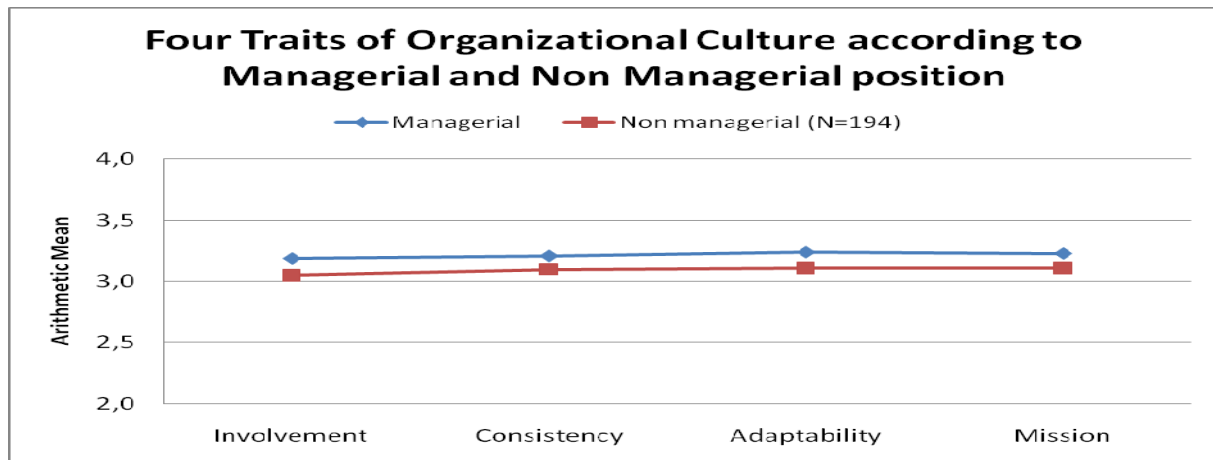
Chart 5: Four Traits of organizational culture – managerial and non managerial roles (Analysis of the authors)

Part of the hypotheses related to the study of structure differences between different groups of participants, and establishing the independent variables that contribute to the distinction between the two groups. Accordingly, we examined the structure of differences between groups of participants with regard to the business areas and the company sector. With regard to the working area of test participants, the variable business areas included the Manufacturing and Transportation (N = 97 Public Service. While the company sector include Marketing and Sales (N = 103), Finance and Insurance (N = 78), Finance and Accounting (N = 87), Human Resources and Administration (N = 64) and Informatics and Telecommunications (N = 20). The initial hypothesis we assumed that it is reasonable to expect differences between the groups both in the field of business areas and in the company Sector. The presented results are analysis of variance for these two independent variables (business areas and business sector).

In Table 6 authors researched different business areas in which respondents are employed through twelve organizational culture indices of Denison model of organizational culture and in Table 7 same business area only between four traits of organizational culture. Table 6 displays results of business areas where respondents are employed through twelve organizational culture indices of Denison model of organizational culture. Business areas were divided into three categories: (1) Manufacturing and transportation, (2) Public service and Education and (3) Management, Finance and Insurance. These results indicate that there is a statistically significant difference between the two groups. It is registered on the dimension of team orientation (F = 3.638, p <0.05). Testing stat. significance between groups showed that groups of Public Service and Education and Management, Finance and Insurance significantly differentiate with a risk level of 5%. The arithmetic mean of the group Team Orientation for Public Service and Education is M=2.92 and the Group Management, Finance and Insurance M = 3.21. So, in the sector (3) Management, Finance and Insurance is in a greater extent present teamwork orientation then in the sector of Public Service and Education. For Capability Development we can see statistically significant F-ratio (F = 7.171; statistically is significant to the 1% risk). Testing statistical significance between groups showed that we have significant statistical difference in group (1) Manufacturing and

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Transportation and (3) Management, Finance and Insurance, with the risk level of 5%. (3) Management, Finance and Insurance (M=3,29) have higher arithmetic mean for Capability Development then Transportation and manufacturing sector (M=3,01). Results have shown that there is a significant statistical difference between groups (2) Public Service and Education and (3) Management, Finance and Insurance, with the risk level of 1%. The arithmetic mean of the Team orientation in the sector (3) Management, Finance and Insurance is a greater extent than present teamwork orientation in the sector of Public Service and Education. For all remaining dimensions between the two groups did not show a statistically significant difference.

Table 6: Results of the ANOVA on business areas variable for three groups of participants (Analysis of the authors)

ORGANZATIONAL CULTURE DIMENSIONS INDICES	BUSINESS AREAS						Stat. difference	
	(1) Manufacturing and Transportation (N=97)		(2) Public Service and Education (N=81)		(3) Management, Finance and Insurance (N=78)			
	Mean	SD	Mean	SD	Mean	SD	F	Scheffe test
Empowerment	3,07	,632	2,99	,633	3,13	,569	1,096	
Team Orientation	3,13	,763	2,92	,674	3,21	,693	3,638*	2-3*
Capability Development	3,01	,675	2,91	,690	3,29	,594	7,171**	1-3*;2-3**
Core Values	3,32	,703	3,11	,684	3,34	,661	2,923	
Agreement	2,99	,583	3,08	,569	3,17	,536	2,036	
Coordination and Integration	3,07	,592	2,87	,473	3,01	,504	3,257*	1-2*
Creating Change	3,12	,622	2,98	,627	3,24	,476	4,128*	2-3*
Customer Focus	3,23	,717	3,05	,593	3,24	,592	2,266	
Organizational Learning	3,02	,622	2,93	,674	3,26	,594	5,724**	1-3*;2-3**
Strategic Direction and Intent	3,22	,711	3,02	,774	3,31	,640	3,483*	2-3*
Goals and Objectives	3,12	,715	3,10	,690	3,19	,746	0,397	
Vision	3,06	,703	2,89	,670	3,07	,571	1,766	

*Remark of meanings: ** $p<0,01$, * $p<0,05$*

For better visibility of the results from Table 6 we presented the results in the following Chart (Chart 6).

Challenges of the Modern World - Contemporary Economy and Globalization
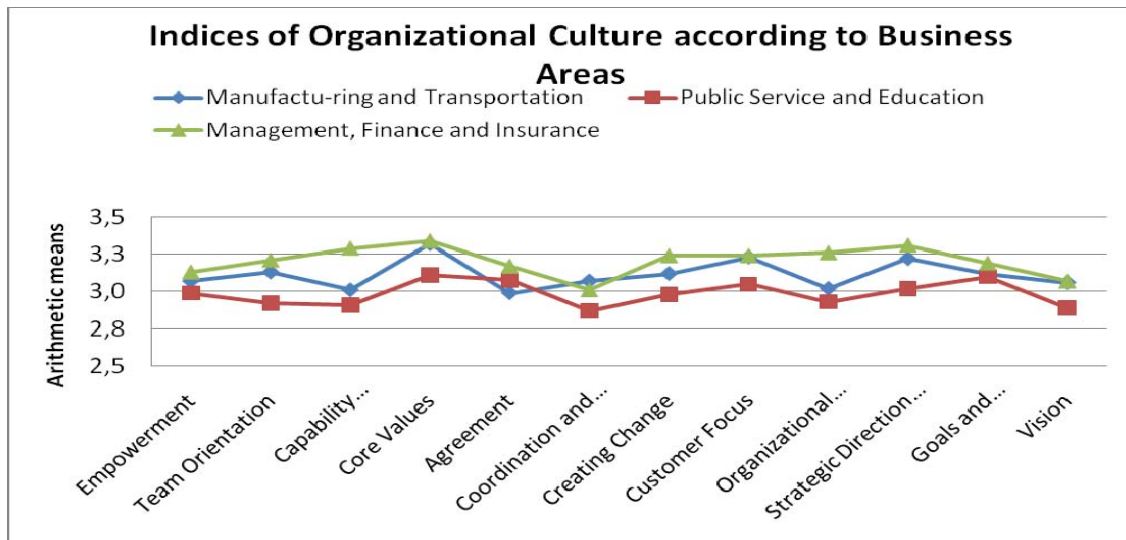
Chart 6: Indices of Organizational Culture according to Business Ares (Analysis of the authors)

Table 7 represents testing statistical significance between the groups in four dimensions. It shows that significantly different groups were Public Service and Education and Management, Finance and Insurance in two dimensions. On the dimension of Involvement (F = 5, 285, p <0.01) and Adaptability (F = 5, 088, p <0.01). Management, Finance and Insurance scored higher means for Involvement (M=3, 21) and Adaptability (M=3, 25), opposite to Public service and education (involvement M=2,94, Adaptability M=2,99).

Table 7: The results of variance analysis on the four dimensions of organizational culture variables on business areas for the three groups of participants (Analysis of the authors)

ORGANZATIONAL CULTURE TRAITS	BUSINESS AREAS						Stat. Difference	
	(1) Manufacturing and Transportation (N=97)		(2) Public Service and Education (N=81)		(3) Management, Finance and Insurance (N=78)			
	Mean	SD	Mean	SD	Mean	SD	F	Scheffe test
Involvement	3,07	,564	2,94	,517	3,21	,489	5,285**	2-3**
Consistency	3,13	,506	3,02	,441	3,17	,388	2,475	
Adaptability	3,12	,553	2,99	,518	3,25	,464	5,088**	2-3**
Mission	3,13	,596	3,01	,594	3,19	,548	2,108	

*Remark of meanings: ** p<0, 01, * p<0, 05*

For better visibility of the results we presented it in the following Chart (Chart 7).

Challenges of the Modern World - Contemporary Economy and Globalization
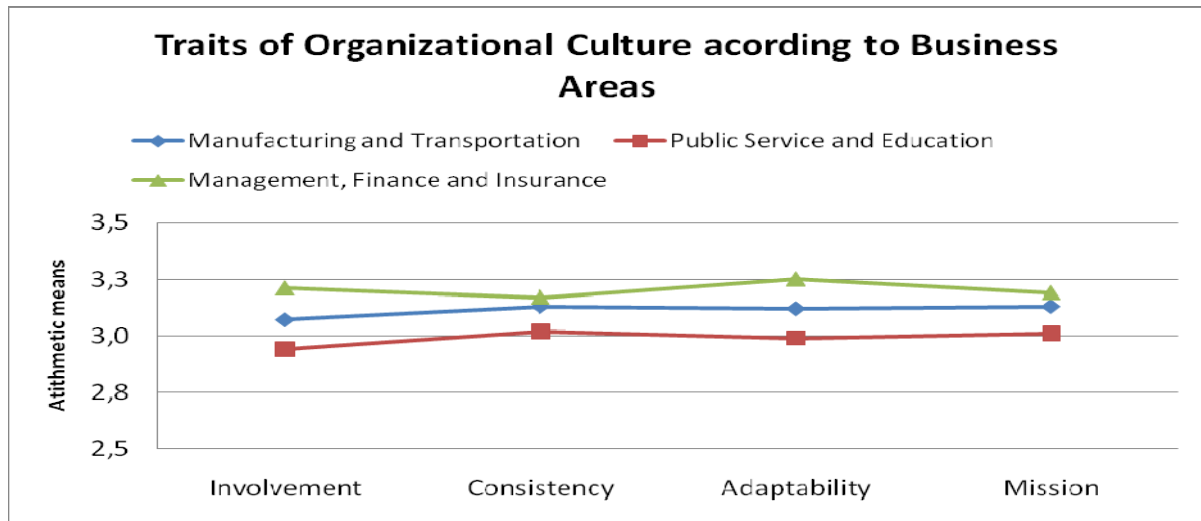
Chart 7: Four traits of Organizational Culture according to Business Areas (Analysis of the authors)

Table 8: The results of variance analysis on the company sector variables for four groups of participants (Analysis of the authors)

ORGANZATIONAL CULTURE DIMENSIONS INDICES	COMPANY SECTOR								Stat. difference	
	Marketing and Sales (N=103)		Finance and Accounting (N=87)		Human Resources and Administration (N=64)		Informatics and Telecommunications /N=20)			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	Scheffe test
Empowerment	3,05	,597	3,13	,561	3,00	,599	3,13	,563	,672	
Team Orientation	3,15	,692	3,16	,724	2,94	,713	2,95	,583	1,621	
Capability Development	3,15	,616	3,09	,689	2,98	,748	3,16	,747	,908	
Core Values	3,26	,673	3,37	,568	3,23	,735	3,32	,824	,544	
Agreement	3,06	,511	3,17	,547	3,08	,567	3,15	,695	,647	
Coordination and Integration	3,03	,537	3,12	,541	2,82	,583	3,13	,548	3,874**	2-3*
Creating Change	3,11	,579	3,32	,501	2,98	,547	3,14	,723	4,045**	2-3**
Customer Focus	3,26	,683	3,22	,578	3,05	,580	3,02	,619	1,954	
Organizational Learning	3,12	,621	3,16	,603	3,06	,624	3,09	,666	,365	
Strategic Direction and Intent	3,26	,729	3,29	,656	3,02	,718	3,05	,668	2,320	
Goals and Objectives	3,18	,688	3,34	,592	3,09	,771	2,88	,676	2,880*	n.s.
Vision	2,99	,640	3,20	,645	3,03	,690	2,95	,671	1,627	

*Remark of meanings: ** $p < 0,01$, * $p < 0,05$*

In Table 8 author researched different company sectors in which respondents work through twelve organizational culture indices of Denison model of organizational culture and in Table 9 company areas were researched through four traits of organizational culture. Table 8 displays results of company sectors where respondents work through twelve organizational

culture indices of Denison model of organizational culture. Company sectors are divided into four categories: Marketing and sales (N=103), Finance and Accounting (N=87), Human resources management (N=64) and Informatics and Telecommunications (N=20). Testing statistical significance between groups showed that significantly different were groups of Finance and Accounting and Human Resources and Administration dimensions: Coordinating and Integration (F = 3.874, p <0.01) and the dimension of Creating Change (F = 4, 045 p <0.05). Coordinating dimension and Integration is more frequent in the group Finance and Accounting (M = 3.12) than in the group Human Resources and Administration (M = 2.82). Dimension of Creating Change was also more frequent for the Accounting and Finance group (M = 3.32). The arithmetic mean for the group Human Resources and Administration is 2, 98. One explanation for such data obtained most likely lies in the fact that in most organizations work tasks in the field of Finance and Accounting more specific than in the field of Human Resources and Administration.

Table 9: The results of analysis of variance on the four dimensions of organizational culture on the company sector variables for four groups of study participants (Analysis of the authors)

ORGANZATIONAL CULTURE TRAITS	COMPANY SECTOR								Stat. difference	
	Marketing and Sales (N=103)		Finance and Accounting (N=87)		Human Resources and Administration (N=64)		Informatics and Telecommunications /N=20)			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	Scheffe test
Involvement	3,12	,494	3,12	,525	2,97	,538	3,08	,558	1,255	
Consistency	3,12	,453	3,22	,397	3,04	,459	3,20	,534	1,920	
Adaptability	3,16	,523	3,23	,442	3,03	,481	3,08	,584	2,041	
Mission	3,14	,566	3,28	,501	3,05	,619	2,96	,500	2,645*	n.s.

*Remark of meanings: ** p<0, 01, * p<0, 05*

For better visibility of the results we presented it in the following Chart (Chart 8).

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Chart 8: Indices of Organizational Culture according to Sector within the Company (Analysis of the authors)

Inspection of Table 10 we see that as far as four further dimensions between the two groups were not found statistically significant differences in the dimensions examined.

Table 10: The results of analysis of variance on the four dimensions of organizational culture on the company sector variables for four groups of study participants (Analysis of the authors)

ORGANZATIONAL CULTURE TRAITS	COMPANY SECTOR								Stat. difference	
	Marketing and Sales (N=103)		Finance and Accounting (N=87)		Human Resources and Administration (N=64)		Informatics and Telecommunications (N=20)			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	Scheffe test
Involvement	3,12	,494	3,12	,525	2,97	,538	3,08	,558	1,255	
Consistency	3,12	,453	3,22	,397	3,04	,459	3,20	,534	1,920	
Adaptability	3,16	,523	3,23	,442	3,03	,481	3,08	,584	2,041	
Mission	3,14	,566	3,28	,501	3,05	,619	2,96	,500	2,645*	n.s.

*Remark of meanings: ** $p<0,01$, * $p<0,05$*

For better visibility of the results we presented it in the following Chart (Chart 9).

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Chart 9: Four traits of Organizational Culture according to Sector within Company (Analysis of the authors)

The results obtained partially confirm the hypothesis. Hypotheses are discussed separately for the results obtained in our research.

First hypothesis; "There will be no differences in perceiving organizational culture according to managerial role of employed students". This hypothesis is confirmed, the fact proved to be statistically significant differences between perceptions of organizational culture according to managerial role of employed students. A statistically significant difference was found on the following dimensions: Coordination and Integration ($t = 3.17$, $p < 0.01$), Empowerment ($t = 1.99$, $p < 0.05$), Capability Development ($t = 2.13$; $p < 0.05$), Agreement ($t = 2.03$, $p < 0.05$), Organizational Learning ($t = 2.44$, $p < 0.05$) and Strategic Direction ($t = 2.180$ $p < 0.05$). It was also confirmed a significant difference for four trait model of Involvement ($t = 2.01$, $p < 0.05$) and adaptability ($t = 2.01$, $p < 0.05$).

Second hypothesis; "Management, Finance and Insurance will have better teamwork orientation then public Service and Education". Our results showed that the above hypothesis is confirmed. There was statistically significant difference in perceptions of team work between the orientation Management, Finance and Insurance and the Public Service and Education. The arithmetic mean of the group Team Orientation Public Service and Education is 2.92 and the Group Management, Finance and Insurance M = 3.21. So, in the sector (3) Management, Finance and Insurance in a greater extent than present teamwork orientation in the sector of Public Service and Education.

Third hypothesis; "There will be no differences in perceiving organizational culture according to company". Results showed that different sectors will perceive organizational Culture differently. According to results we there is statistically significant difference between sector of Finance and Accounting and Human Resources and Administration at following dimensions: Coordinating and Integration (F = 3.874, p < 0.01) and the dimension of the Creating Change (F = 4, 045, p < 0.05). Coordinating dimension and Integration is more frequent in the group Finance and Accounting (M = 3.12) than in the group Human Resources and Administration (M = 2.82). As for the four traits of organizational culture there were no statistically significant differences. Thus, according to results of four traits organizational culture hypothesis was confirmed, but if we take into account the 12 dimensional indices mentioned hypothesis is not confirmed.

4   CONCLUSION

In this paper we investigated organizational culture among employed business-school students according to Denison model of organizational culture; with presumption that employed business-school students will have some working experience, different managerial role and work in various business areas and company sectors. We researched theoretical background of organizational roots and assessment. Organizational culture was assessed in Croatia by three hundred employed business-school students in Croatia. In comparison to other approaches of organizational culture Denison model gave us the opportunity to look at many dimensions indices and traits at the same time and question how respondents differ in answers according to their, managerial role, business area and company sector. For the purpose of the research author used Denison model. Model was translated to Croatian. When we researched different approaches we came to conclusion that Denison approach is different in a way that it has flexibility to choose which segment would author like to assess.

We had seen the great advantage in assessing employee's business-school students outside of their work environment. Overall results showed that there was no difference in perceiving organizational culture for 300 respondents. All of them neither strongly agree nor disagree about organizational culture. On the whole the respondents did not have strong attitudes at any organizational culture dimension index. This result could be explained with assumption that some respondents are too short in their company in order to make general conclusion. Another explanation could be that the result indicates that respondents did not take enough time to differentiate choices. Furthermore it is also possible that respondents were afraid for anonymity of the questionnaire even though it was clearly stated that everything they write is completely anonymous. When it comes to managerial role we were not surprised with results, according to results managers scored higher in approach to business and they are more consistent and predictable. It is often the case that hierarchy defines approach to business. It seems logical that managerial position will have more authority to make business steps and due to their position they have easier approach to information which makes them in a better position for approaching business. At the same time it is interesting to see that there were is difference between managerial and non managerial roles in involvement and adaptability. Denison did similar research in Henkel and results showed that top managers and middle managers differentiate in their perception of mission and core values (Denison consulting, 2011). In our research we assumed that business sectors will differentiate in approach to team work and we predicted well because Management, Finance and Insurance scored higher mean for teamwork orientation then Public service and Education. After our research we came to conclusion that Denison model would be better for specific organization, it could be more detailed. Denison models gives opportunity to see progress. In this research we looked at present situation, further advice would be to do a research in specific Croatian companies. Denison model application on Henkel case showed that there were several cycles of assessing organizational culture and that confirmed our suggestion for repeating the research after the economic crisis (Denison consulting, 2011). After doing the research we came to the conclusion that model should perhaps use 7 point Lickert scale in order to give candidates more choices. Another point is that the way data was gathered was too long. The main purpose of this research was to assess employed business students during period of economic crisis in order to could be repeated in forthcoming period of economic revival.

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MONETARY REGIME, FINANCIAL DEVELOPMENT AND THE PROCESS OF MONEY MULTIPLICATION IN THE EUROPEAN TRANSITION COUNTRIES

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ABSTRACT
The aim of this paper is to investigate the effect of the type of monetary regime and the depth of financial development on the dynamics of money multipliers. It is usually argued that countries with strict monetary regimes and undeveloped financial sectors are more likely to have lower money multipliers than countries with discretionary monetary policies and developed financial markets. However, some countries have rather strict monetary regimes (e.g. Singapore) and very developed financial markets and high (broad) money multipliers. This finding suggests that the level of financial development might be more relevant for the money multiplication process and that the rigidity of monetary policy is not the impediment for the development of the financial sector and increase in the broad money. In order to be able to compare the differences in financial development between developed and developing countries, as well as between countries with different monetary policy regimes, the financial market development indicator (FMDI), created by the World Economic Forum (WEF), is used in this paper. This indicator suggests that the level of financial market development is rather low in European transition countries. Beside underdeveloped financial market and slow reforms (particularly in Bosnia and Herzegovina) another constraint in the region is a high asset share of foreign-owned banks and the dependence of money multiplication process on foreign financial markets. This foreign dependence does not allow complete utilisation of national resources. By diversifying and developing the structure of local financial markets and institutions national resources could be used more efficiently for a country. This could be done by creation and development of the appropriate debt-securities market for investment of short (and longer) term funds. An additional improvement of the institutional infrastructure could be made by establishment of, for example, the development bank, which could be used by government to: initiate and attract development funding; implement a selective credit policy for some strategic area of development. Moreover, government could also affect the interest rate by using the development bank (if appropriate funding is assured), external crisis and shocks could be buffered and local customers better protected.

Keywords: Financial development, Monetary regime, Money multiplication, Transition countries

1 INTRODUCTION

It is usually argued that countries with strict monetary regimes and undeveloped financial sectors are more likely to have lower money multipliers than countries with discretionary monetary policies and developed financial markets. However, some countries have rather strict monetary regimes (e.g. Singapore) and very high (broad) money multipliers. This finding suggests that the level of financial development (which is exceptionally high in

Singapore, as indicated by the financial market development index measured by the World Economic Forum) might be more relevant for the money multiplication process and that the rigidity of monetary policy is not the (necessarily) impediment for the development of the financial sector and increase in the broad money. This might be relevant indicator for some small countries with strict monetary regimes (such as Bosnia and Herzegovina, Bulgaria and Croatia) that the money multiplication might be enhanced even when the passive monetary policy is maintained. This is extremely important since the passive monetary policies in these countries contribute credibility of the monetary authority and enhance macroeconomic stability and therefore should not be fundamentally changed.

At the same time, we must respect the fact that the money as a specific good, which is being used as an exchange medium for any other good, should be as much efficiently used as possible. As other resources, money created by a central bank - high powered money - has been processed and transformed into more sophisticated and valuable forms/products by using increasingly sophisticated technology through the banking and non-banking financial industry. After the creation of the high powered money it is further being "technically processed" within the money flows between the financial institutions and clients/customers by money/deposits multiplication process. Accordingly, this process is fundamentally important to create appropriate monetary aggregates and responding money multipliers illustrate the development of financial system and its institutional infrastructure, which is needed for the (efficient) satisfaction of the everyday increased customers' and economies' needs and requirements.

Since the local financial markets in CBA counties are un(der)developed the money multiplication process is currently being implemented largely by using the foreign markets. However, this is proved to be highly expensive, since more assets first have to outflow (as a short-term funds), than inflow (as a longer-term funds) into these [developing (low- and medium- income)] countries and since foreign banks are charging extremely high interest rates for these transactions. This process limits the development of the real sectors in the Western Balkan countries. Moreover, very scarce instruments for mitigating the effects of shocks are currently available. In this paper, we suggest the introduction of new channels of money multiplication through domestic markets, which could use scarce financial resources more effectively for developing national economies and could be utilised as a buffer against the shocks.

After the short introduction, in the first section the explanation about money as a specific good is given. In the second section we investigate different financial development indicators used as proxies for the financial development. The second section is basically needed for understanding of monetary aggregates and money multiplication process which are discussed in the section three, followed by the analysis of correlation between the financial development and the process of money multiplication, in section four. We finish our analysis by representing the current issues and giving policy proposals for Bosnia and Herzegovina. At the end of the paper we give a short conclusion.

2   MONEY AS A SPECIFIC GOOD
Money is a specific good that has a number of specific functions: medium of (international) exchange, unit of account, store of value and standard of deferred payment, which determines its price – the interest rates (see more in: Keynes, 1987, pp. 133–144; Perišin and Šokman, 1988, pp. 9–44; Božina, 2003, pp. 3–208). Even though nowadays money is manipulated by

the usage of monetary policy instruments, as well as by the money multiplication process, money remains inextricably linked to the deepest nature of its historic origin. Therefore, money is not and can never be separated from its deepest essence of a specific good. Historically, money was, at one point of the commodity production development, "extracted" as the most convenient and efficient economic good able to overtake the function of common/exclusive medium of price expression and the function of smoothing a process of exchange. This selection of a specific good was not made once and for all in a particular historical moment. Namely, money can be observed as a specific good/medium that has been appearing in different forms through history: from the precious metals to fiat money (see more in: Galbraith, 1997; Galbraith, 1995, pp. 104–114; Ferguson, 2009). At one point, when money was represented by precious metals, mainly gold, it was indeed a universal medium of exchange in the international trade and payments. Today, although not as universal as the gold was, this role has the U.S. dollar.

In the process of development of societies and technologies there has been a continuous need for the money transformation and regulation. This is basically being driven by the same forces that led the whole process of capital reproduction, from the liberalism, through interventionism, to repeated (neo)liberalism and (new) globalisation, where we currently are. Since money is a specific good in a function of common unit of value it should be used as effectively and efficiently as possible. Money is universal representation of any other value and consequently can be used easily and without losses for an exchange of any other good. Therefore, handling the money allows capital turnover in any other (productive) form. That, consequently, results in lending from those that have money at disposal (loans' approval) to those that need money for the capital turnover, and charging/earning the interest rate for the loans approved (part of the income/profit) that has been created through capital turnover.

In order to allow smooth mechanism of credit relationship and productive and profitable usage of the specific good - money - it is necessary to create appropriate institutional infrastructure (of banking and non-banking financial institutions; see more: Božina, 2003, pp. 244–306, Mishkin and Eakins, 2012; Ferguson, 2009). Basically, we are talking about the creation and usage of a specific technology that allows money turnover, namely the establishment of the reduced form of the capital turnover → M-M', that can be derived from the general capital turnover M-G-P-G'-M'[1](see Perišin and Šokman, 1988, pp. 89–100, 150–182, 187–192). Thus, money available for loans/investments (basically savings) can be efficiently allocated in the turnover process of any functioning capital in order to generate additional profit. Naturally, the appropriate part of the newly created income/profit necessarily belongs to the borrowed capital (in a form of the interest rate). The loans support the capital turnover in the production and are further expanded for the consumption with the intention of facilitate, foster and extend the process of reproduction. This technology is equally important as any other (productive) technology and its usage, consequently, underlies the well-known principles of productivity, efficiency and profitability.

Historical development and sophistication of institutional infrastructure in the domain of financial institutions structure and operational capacity efficiency is therefore a natural course of events in the progress of society and its general capacity to increase the manufacturing base in order to increase the productivity, cost effectiveness and profitability of production process. For better understanding of this process let observe the example of evolutionary development

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[1]The turnover of capital in production: Money → Goods → Production → Goods (increased value relative to inputs) → Money (increased value after the sale of manufactured goods)

in the wood processing. As a raw material from nature we get the wood by harvesting in the form of wooden logs. Already at this stage we get a large quantity of by-products (lateral branches, bark, and part of the waste wood) that were only later, when imposed by increased needs and enabled by the technological development, began processing of the briquettes for heating and/or wood-pulp and paper manufacturing. Wooden logs are then being processed/cut and prepared for use in the construction industry or in the production of joinery (doors, windows ...), furniture, decoration, luxury yachts and cars, art objects, etc. The final waste wood during this process may be used in the power station, making the briquettes, etc. Another line of technological processing of wood is chemical. We have already mentioned wood-pulp and paper production, but here, in a broader sense, we can mention the production of charcoal, as well as other commodities produced through distillation of wood (a gas that can be used as energy, tars, acetic acid...). All described shows, the starting raw material taken from nature, timber, after passing through increasingly sophisticated technology and complex processing stages, gets progressively diverse production that meets the increasingly differentiated and sophisticated customers' needs, as the society as a whole develops. Certainly, in these processes people are continuously striving to achieve maximum productivity, efficiency and profitability of the available resources and to foster and increase turnover. As a consequence we have cheaper, yet more diverse, quality and extensive production.

Over time, new possibilities are introduced and new materials, such as metal and plastic, are increasingly being used as a substitute for the originally used material – wood. This progress aims to satisfy new and/or transformed needs through new products. For example, a horse and carriage had been replaced with a car. This development process requires more and more investments and discovery of new solutions and technologies in production, enabled by the increased income (and consequently increased savings for necessary investments).

The same can be applied to the historical development of money. We can observe money as a specific good which has been developing and changing forms through development of institutional infrastructure of financial sector, as well as technology. The rationale behind this development is again the achievement of universal principles of goods' production: productivity, efficiency and profitability (cost cutting and turnover increasing through using increasingly advanced technology). Consequently, money as a specific good, which is being used as an exchange medium for any other good, should be as much efficiently used as possible. As other resources, ("raw-material") money created by a central bank, high powered money (reserve money, monetary base - MB) has been processed and transformed into more sophisticated and valuable forms/products by using increasingly sophisticated technology through the banking industry. After the creation of the high powered money it is further being "technically processed" within the money flows between the financial institutions and clients/customers (forming M1, M2 and broader monetary aggregates; see more: Perišin and Šokman, 1988, pp. 47–86; Ćirović, 1987, pp. 3–68; Ćirović, 1976, pp. 217–290). As customers' needs and money flows increases the financial institutions' balances increases as well, similar to the increase of value of capital invested in raw materials and technologies in the production sector. Over time, and with the development of the financial system of a country, these, every day more developed and more extensive balance of financial institutions, impose the need to define and quantify the different monetary aggregates: money supply M1, and broader aggregate M2, M3. Consequently, progress and development of a whole financial mechanism can be observed through money multipliers (m1, m2, m3) (see more in: Havrilesky and Boorman, 1978; Havrilesky and Boorman 1976; Ćirović, 1976, pp.

217–290; Ćirović, 1987, pp. 29–68), which shows the increase of the "financial pyramid" with regards to the monetary base (m1=M1/MB; m2=M2/MB; m3=M3/MB). These monetary aggregates and responding multipliers illustrate the development of financial system and its institutional infrastructure, which is needed for the (efficient) satisfaction of the increased customers' and economies' needs and requirements. Additionally, these monetary variables indicate a need for maintaining a stable value of money, liquidity and efficacy in the increasingly complex financial structure.

By defining the relationship between the total balance of the monetary-financial institutions in relation to the country's GDP, and the extent to which there has been the development of certain monetary aggregates (e.g. in Bosnia and Herzegovina, BH, there is a statistical tracking no more than M1 and M2, while M3, which is targeted in monetary policy by EMU, BH recent developments does not recognize), one can get a basic insight about the extent to which a country's financial system and its institutional infrastructure can efficiently use the available resource of the reserve money (generated by the central bank). Comparing BH, Croatia, Czech Republic and Lithuania with EMU, we found this parameter between 2.8 (Czech Republic, 2010) and 3.9 (BH, 2010) for EMU MFIs` (Table 1).

Table 1: The broadest monetary aggregates and MFIs' assets/GDP (Countries' national (central banks') statistics; Eurostat; DG-ECFIN for the data on the EMU)

Country	BH	Croatia	Czech Republic	Lithuania	EMU
The broadest monetary aggregate:	M2	M4	M3	M3	M3
MFIs' assets/GDP per years	MFIs' assets /GDP	MFIs' assets /GDP	MFIs' assets /GDP	MFIs' assets /GDP	MFIs' assets /GDP
2006			1.00	0.86	2.98
2007	0.90	1.08	1.07	0.96	3.19
2008	0.85	1.08	1.14	0.92	3.05
2009	0.87	1.15	1.18	1.11	3.33
2010	0.86	1.17	1.20	1.06	3.38
2011	0.86	1.19		0.94	

However, in studies which deal with the financial development issues more comprehensive and more complex indicators/proxies for the financial development are used. Therefore, after the short analysis of these different measures used in the literature, we will determine and analyse some potentially relevant indicators for the countries of interest.

3 FINANCIAL DEVELOPMENT INDICATORS

Since there is/are no universally accepted proxy/ies for the financial development different studies used different indicators. Those indicators consider the depth, size, access, efficiency and stability of financial system by assessing banks and other financial institutions, stock and bond markets, as well as institutional environment in a country (laws and regulations). Consequently, most studies used more than one indicator/proxy in order to capture all elements of financial development. Caporale et al. (2009) consider several indicators: the ratio of credit to the private sector to GDP as a measure of financial depth; indicators of the size of

stock markets as stock market capitalisation (as a percentage of GDP); monetisation variables such as the ratio of broad money to GDP as a measure of the size of the financial sector; indicators of the efficiency and competitiveness of the financial system such as the margin between lending and deposit interest rates and the EBRD transition index of financial institutional development. Antzoulatos et al. (2008) formed financial development indices based upon four categories: banks, financial institutions, stock and bond market indices. However, all these indices are created for a certain year (or some time period, but not the most recent one) and do not include all countries of our interest. In order to be able to compare the changes in financial development and between developed and developing, as well as countries with different monetary policy regimes, we used the financial market development indicator (FMDI) created by the World Economic Forum (WEF). Although there is a more comprehensive financial development index (FDI)[2] created also by the WEF, we used FMDI, which is somewhat narrower indicator, since the FDI is not available for the countries of interest. The FMDI assesses the following factors: availability of financial services, affordability of financial services, financing through local equity market, ease of access to loans, venture capital availability, soundness of banks, regulation of securities exchanges and legal rights index based on a executive opinion survey.

Although the focus is on the European transition countries we also observe developed countries, for comparison (and more obvious illustration of some relations). The FMDI implies that, as expected, Switzerland, Singapore and the United Kingdom have higher level of the financial market development than European transition countries. Chart 1 also indicates that Poland and Turkey (which have had proactive monetary policies) actually have had improvement in the financial markets development at the beginning of the crisis, while financial markets in all other countries deteriorated in this period.

Additionally, for the transition countries we can observe the EBRD financial sector indicators for the reform in banking (Chart 2) and non-banking financial sector[3] (Chart 3). From the following charts we can notice that Czech Republic and Croatia have the highest score for the banking sector reform, while the "leading" positions for the non-banking reform belong to Poland and again Czech Republic (which is after 2008 not considered a transition country). On the other side, Bosnia and Herzegovina has the lowest reform scores in both banking and non-banking sector.

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[2] WEF's FDI is consisted on the basis of seven main pillars of financial elements, whcih include institutional environment, business environment, financial stability, banks, non banks, financial markets, size, depth, and access.

[3] These indicators comprises of the following features: number of foreign-owned banks, asset share of state-owned banks (%), asset share of foreign-owned banks (%), non-performing loans (% total loans), domestic credit to private sector (% GDP), domestic credit to households (% GDP), mortgage lending (% GDP), stock market capitalisation (% GDP), stock trading volume (% market capitalisation), eurobond issuance (% GDP).

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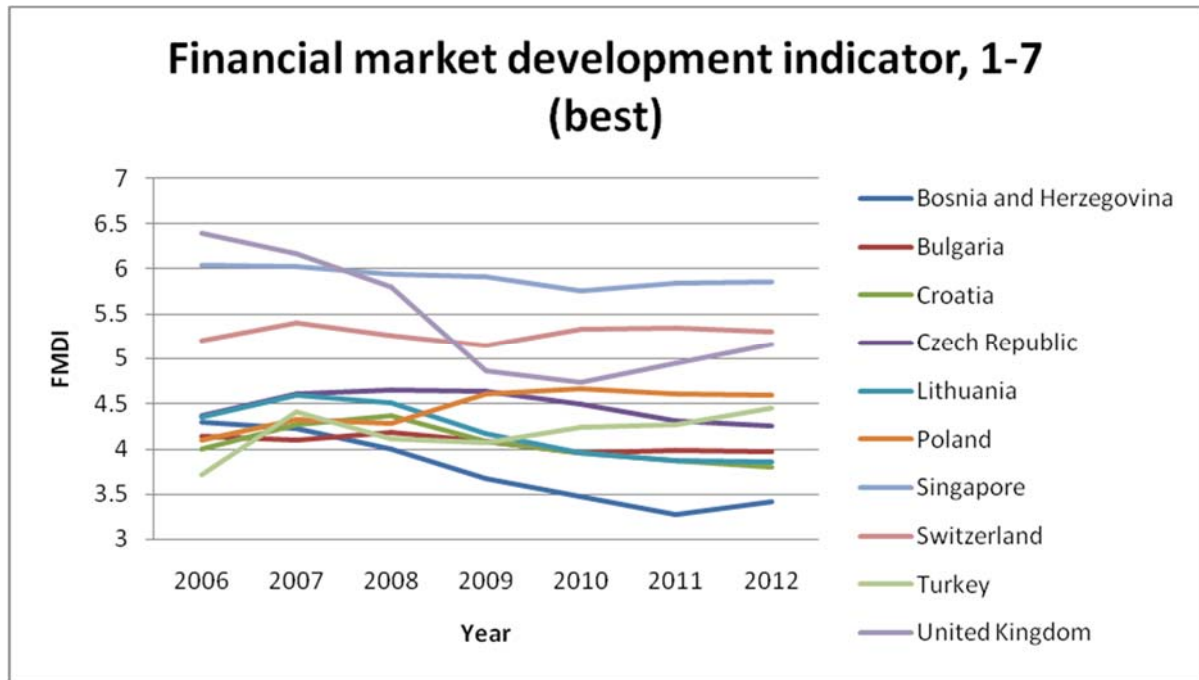
Chart 1: Financial market development indicator
(http://www.weforum.org/issues/competitiveness-0/gci2012-data-platform/)
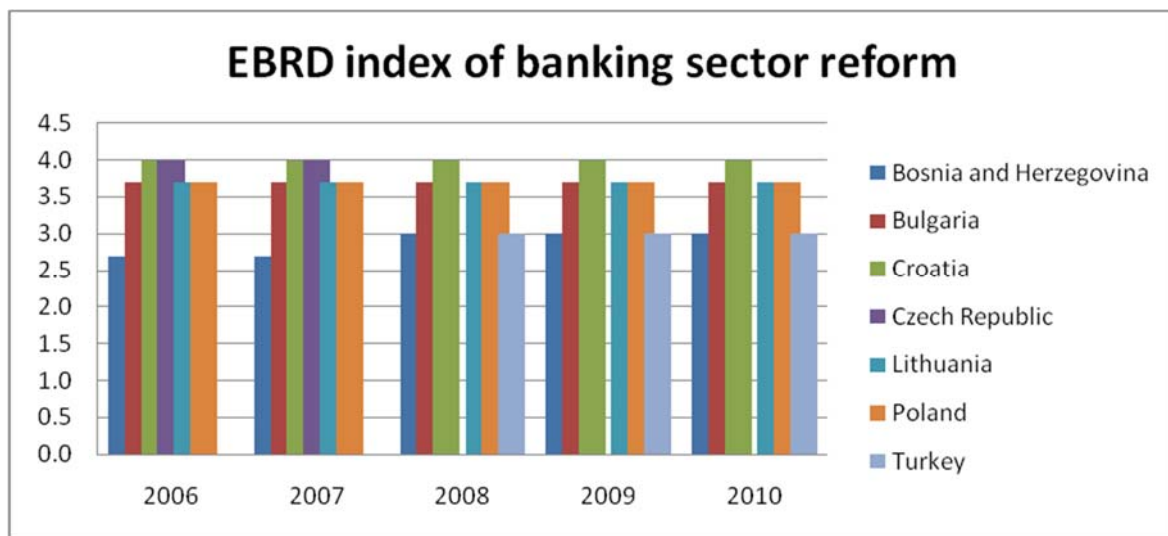
Chart 2: EBRD index of banking sector reform
(http://www.ebrd.com/pages/research/economics/data/macro.shtml#structural)

*Note: There is no data for Czech Republic after 2008, since the EBRD do not consider it a transition country after this point. Index for Turkey exist after 2008
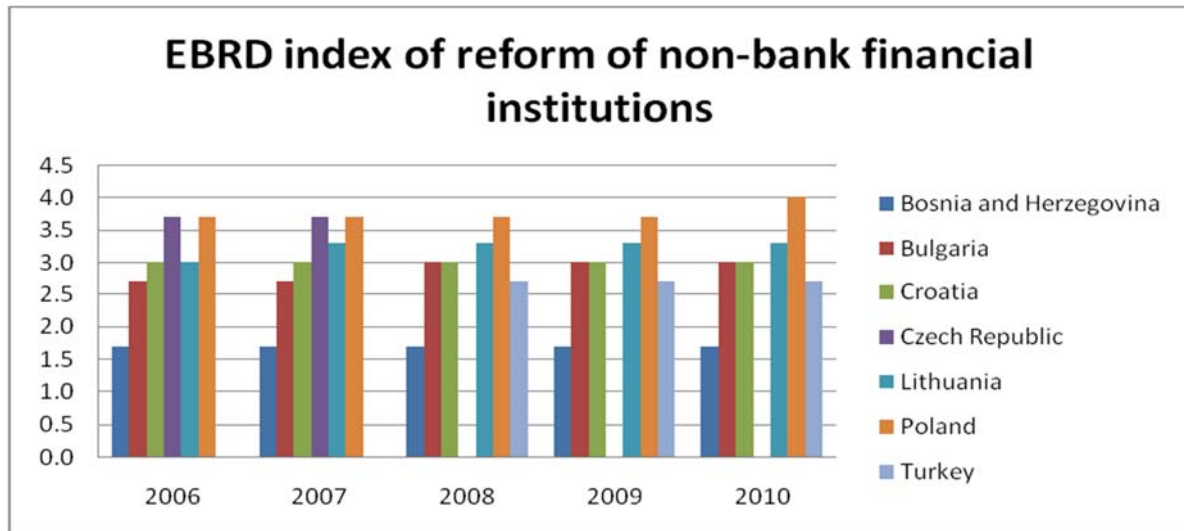
*Chart 3: EBRD index of reform of non-bank financial institutions
(http://www.ebrd.com/pages/research/economics/data/macro.shtml#structural)*

*Note: There is no data for Czech Republic after 2008, since the EBRD do not consider it a transition country after this point. Index for Turkey exist after 2008

4   MONETARY AGGREGATES AND MONEY MULTIPLICATION PROCESS

Another way to observe the differences in the depth of financial system development is by observing the differences in the (broadest) money multipliers among countries (Chart 4). Again, the most developed countries, Singapore, Switzerland and United Kingdom are well above other observed countries. It is also evident that in 2008-2009 there is extremely high drop of money multiplier in the United Kingdom. This is partially result of different recording since, as noted in the IMF IFS documentation, beginning July 2009, refers to M4 excluding intermediate OFCs (M4ex). Another reason for this, as well as other, drops of money multiplier after 2007-2008 is a financial crisis.
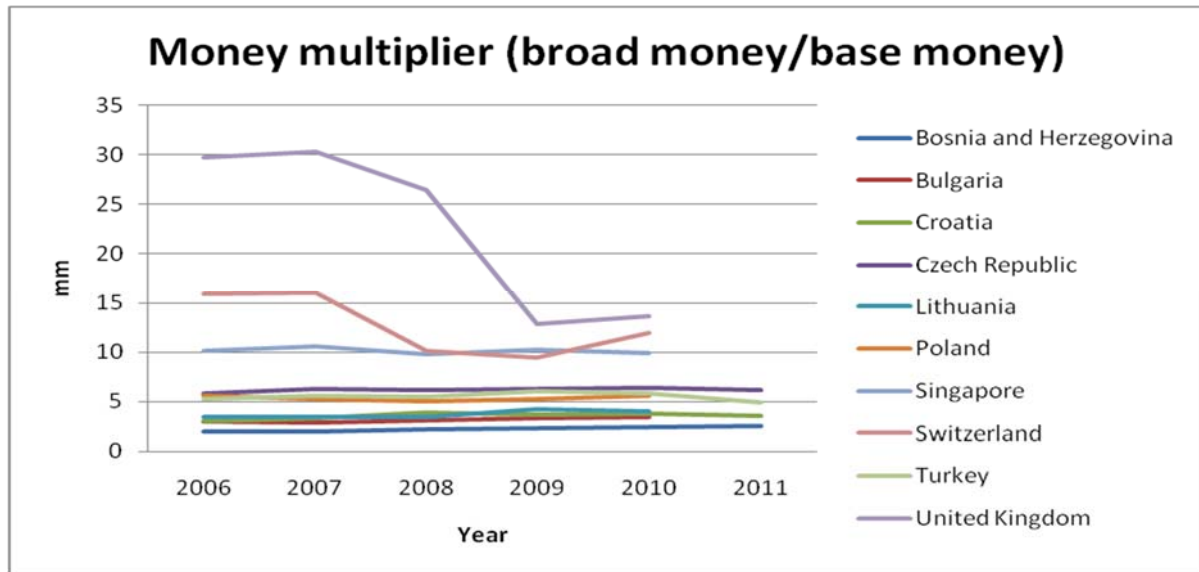
Chart 4: Money multiplier (mm) for selected transition and developed countries (Based upon the calculation of money multipliers according to the data for the monetary aggregated from IMF's International Financial Statistics and WB's World Development Indicator databases)

*Note: The broad money is different monetary aggregate in different countries (see IFS Documentation at http://esds80.mcc.ac.uk/wds_ifs/TableViewer/document.aspx?ReportId=47036)

If we exclude countries with the highest money multipliers and observe only transition countries differences between those (European transition) countries is more evident (Chart 5).
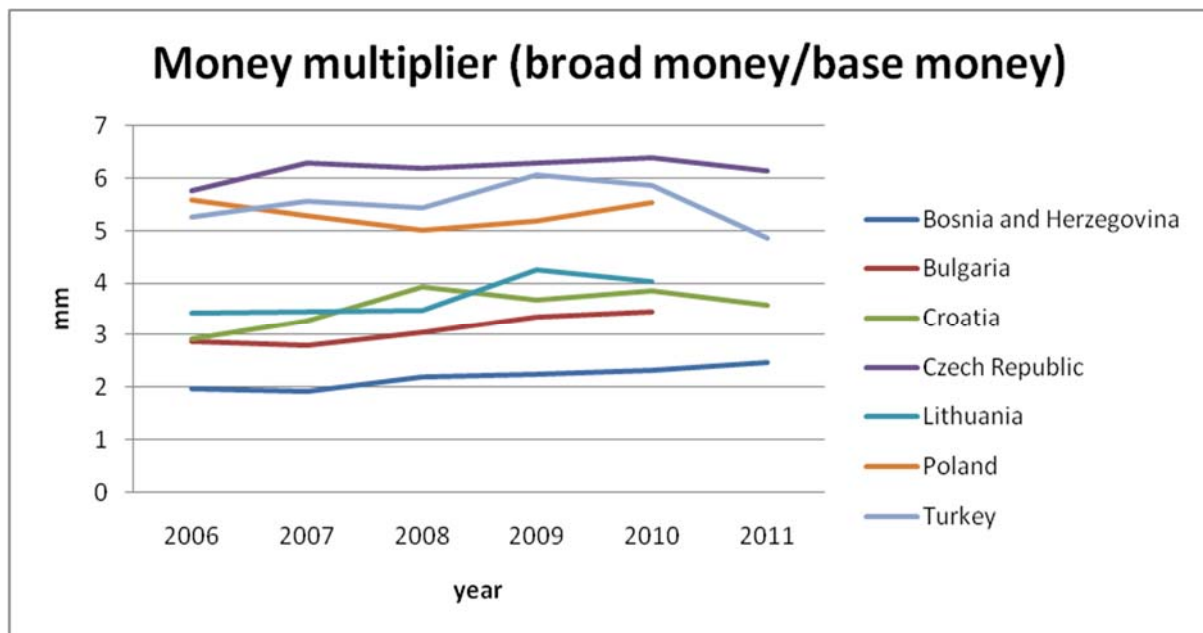
Chart 5: Money multiplier (mm) for European transition countries (Based upon the calculation of money multipliers according to the data for the monetary aggregated from IMF's International Financial Statistics and WB's World Development Indicator databases)

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Again, Bosnia and Herzegovina is "at the bottom", with the lowest money multiplier (calculated as a ratio between the broadest monetary aggregate and monetary base). Other countries with a currency board regime have also low money multipliers (Bulgaria, Lithuania and Croatia, whose monetary regime is usually described as a currency board-like). However, it has to be noted that those countries also have had the greatest stability of both monetary and financial sectors, probably due to strict rules and full coverage monetary base (which increase monetary credibility and confidence in monetary and financial system). Again, Czech Republic, Poland and Turkey (which have more discretion in the implementation of monetary policy, and are also more developed than other European transition countries observed) have the greatest money multipliers. It can be noticed that countries with low banks' (MFIs') assets/GDP ratio also have low money multipliers, which might be indicating that more developed financial system uses money as a resource more efficiently.

5 CORRELATION BETWEEN THE FINANCIAL DEVELOPMENT AND THE PROCESS OF MONEY MULTIPLICATION

From the above analysis, it can be perceived that countries with more strict monetary regimes have lower financial development. Even though most of the countries are directly or indirectly connected to the euro (as can be noted from the *de facto* exchange rate classification shown in Table 2), there are differences among the countries in the types of monetary regime and the level of discretion in the way how monetary authorities operate.

Table 2: Exchange rate regimes in countries (Ilzetski et al., 2010)

Country	Period	Exchange rate regime	
Bosnia and Herzegovina	Jan. 1999 – Dec. 2010	Currency board/Peg to euro	
Bulgaria	Jan. 1999 – Dec. 2010	Currency board/Peg to euro	
Croatia	Jan.1999 – Dec. 2010	De facto band around euro	+/- 2% band.
Czech Republic	Jan. 2002 – Dec. 2010	De facto crawling band around Euro	+/- 5%
Lithuania	Feb. 2002 – Dec. 2010	De facto band around the euro.	Band is +/- 2%. Joined ERM II on June 28, 2004. En route to joining the euro zone in 2010
Poland	April 2000 – Dec. 2010	Managed floating/de facto band around euro	+/- 5% band. Fluctuations have remained consistently inside this band at least 95% of the time. Significant depreciation during 2008Q4 to 2009Q1.
Singapore	June 1973 – Dec. 2010	De facto moving band around the US dollar	+/- 2% band. Officially adjusted on the basis of a basket of currencies
Switzerland	Jan. 1999 – Dec. 2010	De facto moving band around euro	+/- 2% band.
Turkey	April 2003 – July 2007	Freely floating	
	Aug. 2007 – Dec.2010	Managed floating/De facto band around US dollar	Band is /-5%. Significant depreciation in October 2008, accompanied with annualized inflation nearing 40%.
United Kingdom	Jan. 2001 – Dec. 2008	De facto moving band around the euro	+/-2% band
	Jan. 2009 – Dec. 2010	Managed float	

In order to observe the correlation between the money multiplier and the level of financial development, next we observe the two in one chart (Chart 6). As this chart implies more developed financial systems tend to have higher money multipliers. Again, three developed countries (United Kingdom, Switzerland and Singapore) are above European transition countries. Czech Republic, Poland and Turkey follow, while CBA(like) [4] countries (Bosnia and Herzegovina, Croatia, Bulgaria and Lithuania) have low-grade performance (the inferior progress in money "processing" process).
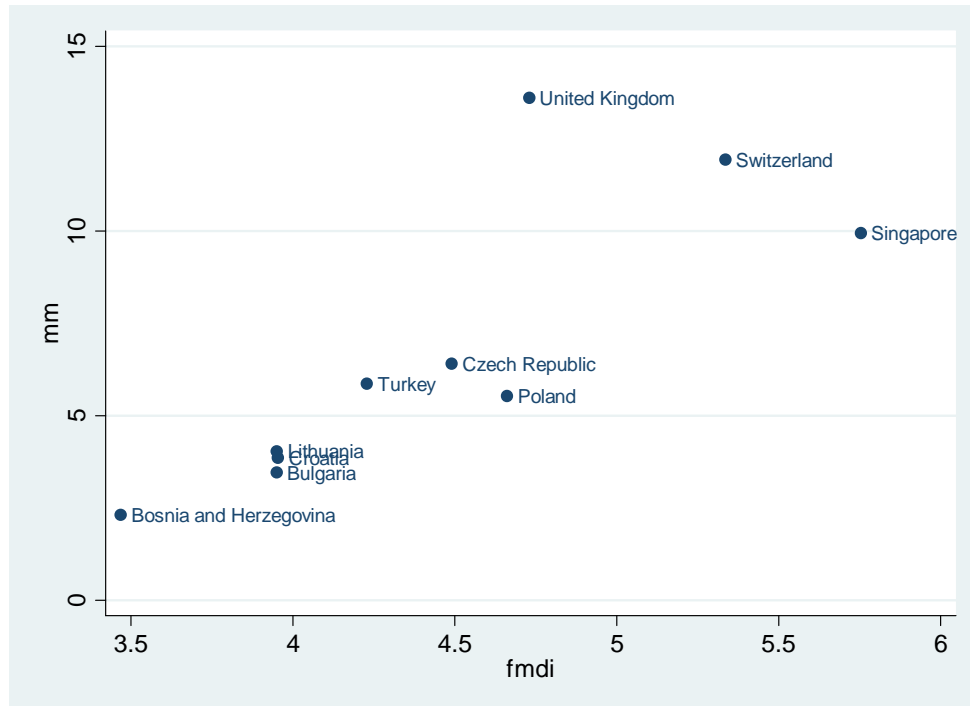
Chart 6: Money multiplier and FMDI (2010) (STATA12 printout based on the data on money multipliers and FMDI discussed and investigated above)

Simple univariate analysis also indicates that the financial market development significantly and positively affects the money multiplier (Appendix 1). However, the correlation coefficient between the two variables is high, which indicates the problem of high multicorrelation. This simple analysis is conducted not to make any statistical inference (since we do not control for other potential determinants) but only to indicate high positive correlation between the two variables. Since Bosnia and Herzegovina is a transition country, which is going through the process of development, it needs as much funds as possible. However, according to the above analysis it can be notice that it has the lowest scores for both financial development and money multiplication. Therefore, we will investigate reasons for such a bad performance in more detail and give some recommendations for increasing these

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[4] Under a currency board arrangemnet (CBA) a country fixes its nominal exchange rate to some foreign currency and maintains 100 percent backing of its monetary base with the selected stable foreign currency. Moreover, the monetary authority cannot use the usual monetary policy instruments and is usually described as non-discretionary. BH's CBA deviates from the orthodox rules by using the reserve requirements as a policy instrument, while CBAs' in Bulgaria and Lithuania are even more flexible. The monetary regime in Croatia have been described as CBA-like due to high (more than 100%) coverage of monetary base with foreign reserves and limited use of monetary policy instruments.

scores, but without violating the stable pillar of monetary policy, established by the currency board arrangement.

6 CURRENT ISSUES AND POLICY PROPOSITIONS FOR BOSNIA AND HERZEGOVINA

Beside underdeveloped financial market and slow reforms in Bosnia and Herzegovina another constraint is a high asset share of foreign-owned banks (see Chart 7) and the dependence of money multiplication process on foreign financial markets. Namely, the problem of maturity mismatching between deposits and loans and inability to take over the risk of maturity matching is evident, mostly due to strict regulations. The maturity matching under CBA(-like) regimes (which is essential for satisfying the time-structure of credit demand adequately) is possible only by depositing short-term assets abroad and withdrawing the long-term liabilities from abroad, allowing higher supply of needed longer-term loans (as well as additional increase of the monetary and credit multiplication), as illustrated by Chart 8 (for more details see Kreso and Begovic, 2012). This approach is proved to be an expensive method for overcoming the maturity mismatching, since foreign banks charge high prices for the conversion of short-term deposits into longer-term loans. Actually, the "raw material" (short-term deposits) is exported and "processed" outside the country and then send back as long-term loans (from foreign banks to Bosnia and Herzegovina). This is not only the issue in Bosnia and Herzegovina, but due to the lowest level of development of financial markets and institutions and strict rules imposed by the currency board (like) arrangement it is the most pronounced in the region (in the transition countries). Moreover, there is no buffer against the shocks, since monetary policy is passive (and Central Bank cannot act as a lender of last resort) and foreign banks are primarily focused on profits and may withdraw their funds from the country when they consider it insufficiently profitable, which makes the financial system relied on foreign banks even more fragile.
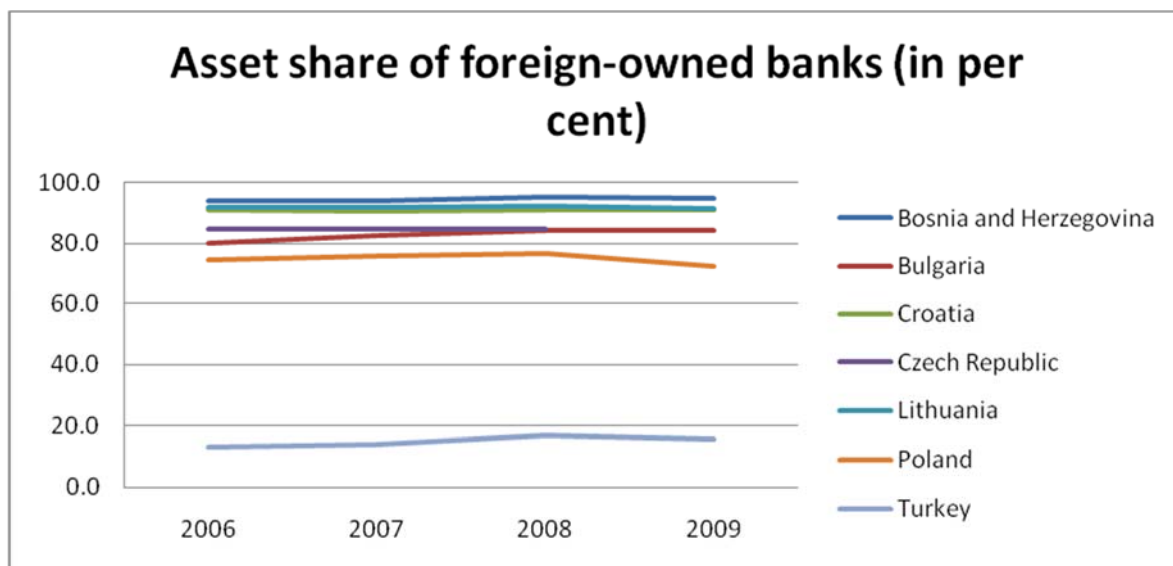
Chart 7: Assets share of foreign-owned banks (in percent) (EBRD)
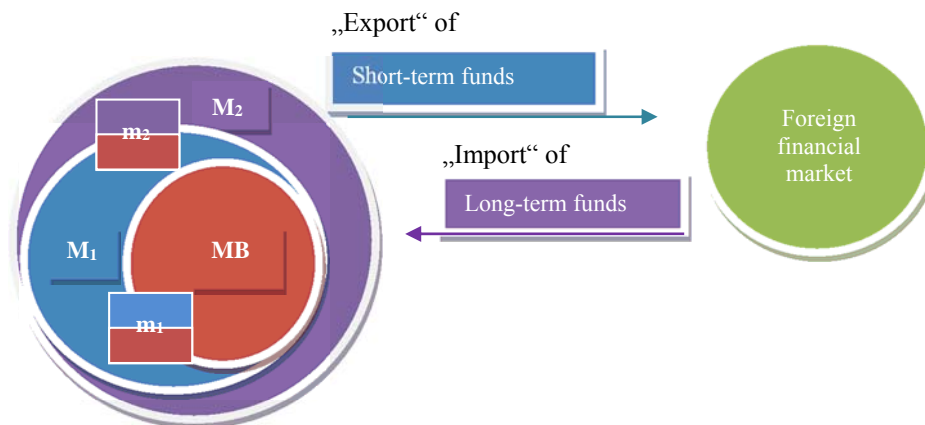
Chart 8: Maturity matching process in Bosnia and Herzegovina (Authors' illustration)

This resembles the export of energy, timber, iron, etc., which we are not able to adequately process by using the available national industrial capacity, so we then import wood panels and furniture, a variety of industrial and food products, automobiles, etc. It is certain that we could have had more gain for the economy and society with the higher and faster development by using our own capacity. However, in the field of finance, the question is how can this process be improved without violation of the currency board functioning[5]. What is the potential role of government and whether it can (and should) be more proactive in these processes?

By diversifying and developing the structure of local financial markets and institutions the maturity matching requirement could be satisfied less costly for the country. Namely, creation and development of the appropriate debt-securities market for investment of short (and longer) term funds (trough issuance of short and longer-term securities by state, then followed by companies) would allow short (and longer) term deposits from the BH banks` to be more intensively invested in these debt-securities market. This competition between State of BH and banks in BH would (and should) make more efficient usage of national financial resources. Under the condition of liquid markets, households and companies would buy government and corporate bonds, treasury bills and commercial papers, potentially earning more compared to depositing money in the banks. This would increase the competition with respect to the banking sector which is currently the pre-dominant agent for investing and borrowing in the observed countries. Additionally, this should initiate better dynamic at the local financial market and could be expected to increase the liquidity as well. This should also result in more effective use of domestic money sources in domestic economy (matching of demand and supply through local financial market). This could also be achieved through government support of local commercial banks (particularly small(er) banks). Another proposition for "processing" money and lowering costs of money "conversion" (short term deposit to long(er) term) is the improvement of the institutional infrastructure by government, through establishment e.g. of the development bank. This Bank, adequately/professionally govern, could solve few problems:
1. It could initiate and attract development funding for infrastructure and create programmes for investment – to issue the securities and guaranty their liquidity. This

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[5] Since the CBA in Bosnia and Herzegovina is proved to be a source of monetary credibility and stability the other ways of fostering this progress are proposed.

institution should be supported by government, e.g. issuance of warranty from the government, by holding the budget reserves at the development bank's accounts;
2. Selective developing credit policy (for example for agriculture) which is not any more popular as a monetary policy instrument, but again government should proactively be involved in these programmes (attracting cheap funds or any other kind of support, such as subsidising the interest rates by the government, for loans granted through the development bank)[6]
3. Previously issued securities could be a base for government to buy and sell securities (but these should be based on the reserves previously deposited e.g. at the Central Bank). By doing this government could affect the interest rate and be a some kind of substitute for Central Bank`s open market operations, which does not have this ability under the CBA. Once again, these operations should be based on reserves since "ex nihilo" issuance is not allowed under a CBA. This approach necessarily requires forming of reserves and/or finding and attracting cheap credit lines and warranties.
4. The consequences of external crisis and shocks could be buffered and the local customers better protected.

7 CONCLUSION

Money is a specific good and, even though nowadays it is manipulated by the usage of monetary policy instruments, money remains inextricably linked to the deepest nature of its historic origin. The money available for loans/investments (basically savings) can be efficiently allocated in the turnover process of any capital operation in order to generate an additional profit. It is the main reason for money to be used as effectively as possible. This is extremely important, particularly for non-developed and transition countries, since it should provide progress of society and build up its general capacity to increase the manufacturing base. In order to allow smooth mechanism of credit relationship and productive and profitable usage of money, it is necessary to create an appropriate institutional infrastructure (of banking and non-banking financial institutions).

One can get a basic insight about the extent to which a country's financial system and its institutional infrastructure can efficiently use the available resource of the reserve money (generated by the central bank) by defining the ratio between the total balance of the monetary-financial institutions to the country's GDP. Comparing this ratio in BH, Croatia, Czech Republic and Lithuania with the one in EMU it is noted that it is much higher in EMU (in 2010 it was around 1 in the transition countries, while in the EMU it was 3.38). Financial market development indicator (FMDI) created by the World Economic Forum indicate lower development of financial markets in countries with less active monetary policies. Another way to observe the differences in the depth of financial system is by observing the differences in the (broadest) money multipliers among countries. By analysing the monetary aggregates and money multipliers we may conclude that countries with a CBR(-like) regime have rather low money multipliers (Bosnia and Herzegovina, Bulgaria, Lithuania and Croatia). However, it has to be noted that those countries also have had the greatest stability of both monetary and financial sectors, most likely due to strict rules and full coverage monetary base (which increase monetary credibility and confidence in monetary and financial system).

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[6] For example, we can mention the International Rice Research Institute (IRRI) whcih is a nonprofit organization, which means that any funds received go directly toward achieving goals of reducing poverty and hunger, improving the health of rice farmers and consumers, and ensuring that rice production is environmentally sustainable.

Beside underdeveloped financial market and slow reforms another constraint in the European transition countries (particularly in Bosnia and Herzegovina) is a high asset share of foreign-owned banks and the dependence of money multiplication process on foreign financial markets. This foreign dependence does not allow complete utilisation of national resources. By diversifying and developing the structure of local financial markets and institutions national resources could be used more efficiently for a country. This could be done by creation and development of the appropriate debt-securities market for investment of short (and longer) term funds. An additional improvement of the institutional infrastructure could be made by establishment of, for example, the development bank, which could be used by government to: initiate and attract development funding; implement a selective credit policy for some strategic area of development. Moreover, government could also affect the interest rate by using the development bank (if appropriate funding is assured), external crisis and shocks could be buffered and the local customers better protected.

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APPENDIX

Appendix 1

```
. regress mm fmdi

      Source |       SS           df       MS              Number of obs =        54
-------------+------------------------------              F(  1,    52) =     89.57
       Model |  1354.93942        1  1354.93942           Prob > F      =    0.0000
    Residual |  786.572323       52  15.1263908           R-squared     =    0.6327
-------------+------------------------------              Adj R-squared =    0.6256
       Total |  2141.51174       53  40.4058819           Root MSE      =    3.8893


------------------------------------------------------------------------------
          mm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        fmdi |    6.84762   .7235147     9.46   0.000     5.395781    8.299458
       _cons |  -24.09227   3.355236    -7.18   0.000    -30.82504    -17.3595
------------------------------------------------------------------------------


. xtreg mm fmdi, fe (controlling for country-specifics)

Fixed-effects (within) regression              Number of obs      =        54
Group variable: countryid                      Number of groups   =        10

R-sq:  within  = 0.4468                         Obs per group: min =         5
       between = 0.6633                                        avg =       5.4
       overall = 0.6327                                        max =         6

                                                F(1,43)            =     34.74
corr(u_i, Xb)  = 0.1918                         Prob > F           =    0.0000


------------------------------------------------------------------------------
          mm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        fmdi |   5.960452   1.011315     5.89   0.000     3.920941    7.999964
       _cons |  -20.02961   4.640049    -4.32   0.000    -29.38716   -10.67206
-------------+----------------------------------------------------------------
     sigma_u |  3.6995724
     sigma_e |  2.1083671
         rho |  .75484226   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(9, 43) =    14.88              Prob > F = 0.0000


. corr mm fmdi
(obs=54)

             |       mm     fmdi
-------------+------------------
          mm |   1.0000
        fmdi |   0.7954   1.0000
```

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avplots

coef = 6.8476199, se = .72351471, t = 9.46

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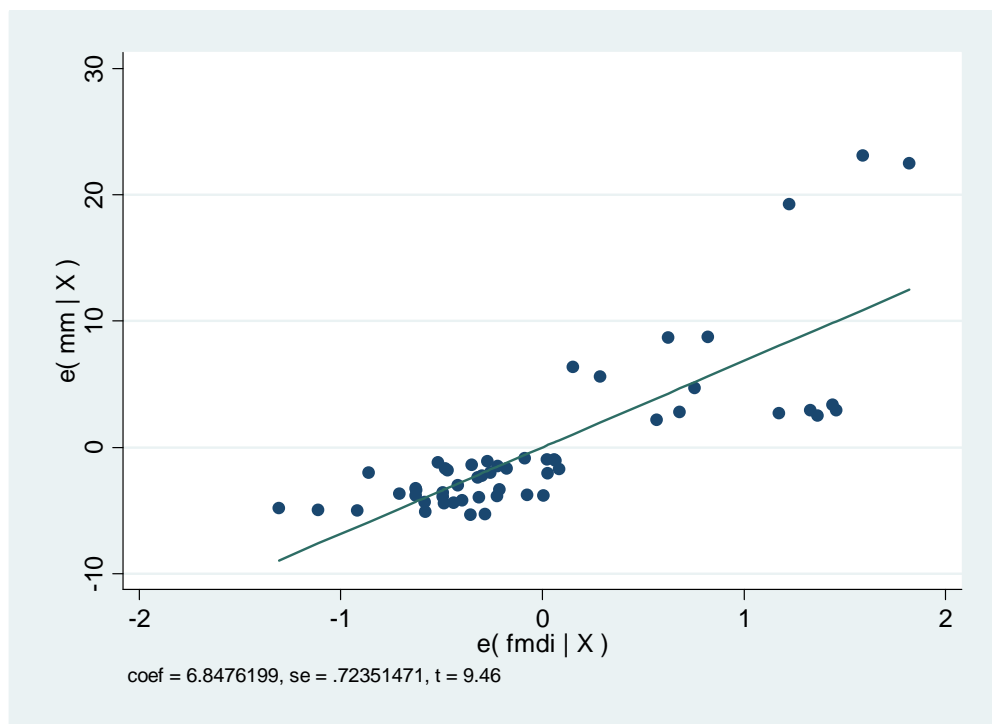
TAX IMPLICATIONS OF USING TRANSFER PRICING

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ABSTRACT

Transfer pricing in related-party transactions, represent one of the most actual area in contemporary business. It's different from prices that are arranged between unrelated companies for comparable transaction in equal circumstances. It's used in profit transferring for minimazing tax burden and maximizing consolidate profit. In 1995 OECD established transfer pricing guidelines for multinational companies and tax administrations on international level. From tax aspect, the most important matter is to document and determine transfer prices with appropriate method because of proving the arm's lenght principle. Worldwide, the focus is on their audit and control (North and Latin America, Asia-Pacifik). The most important procedures for dispute resolution are cost sharing agreements, advance pricing agreements and mutual agreement procedures. Tax administrations in European Union also strengthen transfer pricing audits by adopting Codes of conduct. Joint transfer pricing forum works on consensus principle in order to resolve transfer pricing practical problems. In Republic of Croatia, first transfer pricing regulation is established in 2005. OECD guidelines are implemented in corporate tax law, it's regulation and common tax law, but also in 2009. Tax administration published Manual for transfer pricing audit. The purpose of this paper is to analyze transfer pricing, which can not be cancelled, but it's necessary more detailed and concrete transfer pricing institucional determine.

Keywords: Associated Companies, Croatia, Double Taxation, EU, Oecd Guidelines, Transfer Pricing

1 INTRODUCTION

Transfer pricing represents one of the most significant and up-to-date areas in modern business operations. Initially, transfer pricing was understood exclusively as the pricing of the transactions performed among single organizational parts and the company's responsibility centres, the company owners this way achieving different objectives. Today, companies are crossing national borders creating affiliated companies based on capital, management and control rights, so that with the globalization of businesses, transfer pricing is getting a new dimension and significance. The notion of transfer pricing in modern business environment is, therefore, considerably broader and more complex and connected with business merging at the international level.

The modern definition of transfer pricing describes it as the pricing at which transactions among mutually affiliated companies, that is companies that are group members, are conducted. Such pricing is not stipulated in the free market and can vary from the pricing stipulated by non-affiliated companies in a comparable transaction and under the same

circumstances. They generate accounting and taxation effects which are manifested when profit is being declared. Transfer pricing affects the process of business decision making as for the input and output and this way affects profit taxation and investment return rates. Since the members of the international group operate in different tax systems, transfer pricing represents an attempt to transfer the profit from group members operating in high tax burden systems to group members operating in lower tax burden systems. This way, it is possible to decrease the tax burden and consequently to stimulate the maximization of consolidated profit. As more than two thirds of international trade worldwide are related to multinational companies, transfer pricing represents one of the most important tax problems globally.

The spreading of multinational companies' businesses is simultaneously followed by the development of tax regulations in the sense of transfer pricing. So, the tax authorities determine such transfer pricing which conveys the right value of a transaction among affiliated companies by concluding contracts on double taxation avoidance, bilateral contracts and national legislation. In order to prevent manipulations with transfer pricing on the part of groups at the international level, OECD has issued directives on transfer pricing for multinational companies and tax administrations and they are a widely accepted way of how to regulate transfer pricing at the international level. Most countries implement those directives into their legislative regulations to establish a unique treatment for transfer pricing defining, monitoring and controlling in internationally affiliated companies.

2   TREATMENT AND REGULATIONS OF TRANSFER PRICING

The first attempts to regulate multinational companies appeared in 1976, when the OECD directives for multinational companies were adopted and they represented recommendations intended for governments and the companies themselves. In 2000 they were reviewed and their implementation was improved. They consist of voluntary principles and standards for responsible company management according to the laws in force. The directives' objective is to have such companies do business in accordance with the government policy, to improve mutual trust among the companies and societies they are operating in, to improve the climate and environment for foreign investment and also to contribute to sustainable development. The directives regulate numerous issues such as concepts and principles, general measures and policies, information disclosure, employment and industry relations, the environment, corruption fighting, protection of consumers' interests, science and technology, competition and taxation. The directives related to the transfer pricing issue are enclosed in the section dealing with taxation, information and data disclosure. It is important that companies make their contributions to the public finances of the state they are operating in by meeting their tax obligations regularly and on time (OECD Library, 2012). The companies have to respect the tax laws and regulations in all the countries they are doing business in and have to operate accordingly. They should also provide all relevant information to the authorities about their activities, structure, financial situation and business operations in order to precisely determine their tax obligations on the basis of their business activities. The companies should as well apply high standards concerning the disclosure of information, accounting and auditing.

In 1995, OECD published the directives which define transfer pricing for multinational companies and tax administrations with specific chapters about the principle of unbiased transaction, methods of defining transfer pricing, the administrative aspects of transfer pricing and the documentation, and in 1996 the directives were completed with chapters about intangible assets and services. Besides that, they include chapters about comparability analysis, administrative approaches on how to avoid and solve disputes, including also the

agreement on sharing common expenses. They represent an internationally accepted standard for transfer pricing determination and control in order to prevent manipulation by applying the principle of independence. The OECD directives are extensive so that some inconsistencies can be noticed and they therefore represent simply instructions on how to regulate the issue of transfer pricing in particular countries. There is an attempt to harmonize transfer pricing with OECD directives so as to make bilateral and multilateral agreements feasible and easier to conclude, and to reduce the risk of double taxation. Different methods are used to implement the principles of unbiased transaction, while transfer pricing is being determined. They have their foundation in classical methods of transfer pricing determination, but are adapted to tax administrations which carry out the transfer pricing control and the transactions among affiliated companies. Contrary to accounting methods, the methods of transfer pricing determination pursuant to the OECD directives are directed not only at the determining itself but also at the control and checking of transfer pricing at the international level.

2.1   Tax implications of transfer pricing

The purpose of transfer pricing can be observed depending on whether there is one subject which has a decentralized organizational structure or there is a group made of the parent company and branches at the national or international level. From the tax aspect, transfer pricing is about the companies' proving in a well-documented manner the comparability of transfer pricing with the market pricing. Taxation is, actually, the environment factor the persons making decisions in the company have no influence on, but they can change the result of their activities. Otherwise, the taxation of the company itself depends on the principles existing in national legislations. Taxation, according to the world principles, means that the companies which have their seats in the parent country are subject to profit taxation independently of the area they are performing their activities in. Those subject to taxation by territorial principles are obliged to pay tax only on the profit made in a particular area. Companies organized in a group of companies doing business in more than one country have more room for manoeuvre regarding the possibility of tax reduction. In countries with high profit tax rate, the owners tend to move their businesses to countries with lower tax rates. Let us suppose the company has generated the profit before the taxation of 1 monetary unit and has to, along with the taxation of 40%, pay the state 0,40 monetary units for each monetary unit of the profit, which means that there are 0,60 monetary units left to the company. Then, let us suppose that the total balance of 0,60 m.u. is divided among the shareholders in the form of dividends, which are taxed again. If the taxation rate for the dividends is 50%, that means the shareholder has to pay the tax in the amount of 0,30 m.u. and that out of the initial 1 m.u. there is 0,30 m.u. left to the shareholder.

For that reason, the companies establish their companies, branches or other organizational forms in more tax favourable foreign countries, in which case transfer pricing emerges having multiple effects at the multinational group level. They have an immediate impact on how high is the business result of the group members in the offer chain, and the consequence is also a different profit tax level as well as the taxation of the distributed profit of the group members in different countries. In other words, the profit from countries with high tax rates is transferred to countries with lower profit tax rates, which affects the increase of profit in the countries with lower profit tax rates. On the other hand, transfer pricing can have a controlling role too, if, for example, the parent company wants its branch to pay them dividends, and the branch can not do that due to legislation limits, the parent company will then artificially increase their profit and reduce the branch profit. The most important reasons for the

application of transfer pricing are because of the estimation of profit – the increase of consolidated profit and decrease of tax obligation, determination of expenses, then control and responsibility assessment.

The application of transfer pricing to minimize tax obligations at the group level is possible with groups whose societies act in different tax systems in which way the advantages and disadvantages of the same are made use of. There is a misuse of transfer pricing policy if the profit and expenditure are improperly allocated in order to reduce the taxable profit. The manipulative effect of transfer pricing at the international level is achieved in the way that the affiliated companies acting under unfavourable tax conditions charge low transfer prices for the deliveries of their goods and services to the members operating under more favourable tax conditions, and the members operating under more favourable tax conditions charge high transfer prices for the deliveries of their goods and services to the members doing businesses under more unfavourable tax conditions.[1] On the assumption that there is an equal tax base of profit tax, the profit is transferred with transfer pricing from group members operating in the country with high profit tax rate to the members operating in the country with a lower profit tax rate. Some other economic objectives can be achieved with the application of transfer pricing: a better competitive position in a particular market, development stimulation of a certain subject, risk minimization of currency rate change and so on. Such transfer pricing manipulation is prevented with the application of a unique taxation treatment of transfer pricing at the international level and the application of the principle of independence. According to that principle, regulated by contracts on double taxation avoidance, affiliated companies have to determine transfer pricing in the amount of the market prices which would be charged for the same type of transaction and under the same conditions to non-affiliated companies or third persons outside the group. The problem of transfer pricing can be solved by stipulating adequate methods for their determination and by concluding the agreement on double taxation avoidance. Taxes become important for decision making when in the evaluation of mutually exclusive alternatives they impact the business decision making and when the non taking of taxation into consideration would result in a decision which would not be in accordance with the company basic objective, and that is the maximization of profit. Affiliated companies performing mutual transactions try to obtain the most favourable tax burden through transfer pricing. Tax on profit can influence the monetary flows of the company and reduce the sheer cash flow so that the company has to be informed about its influence and manage it accordingly.

2.2   Regulation of transfer pricing

The European Union directives regulating the areas of international taxation comprise the directives aligned and passed by the Council in the mid 1990s. The first Directive is about the parent and dependent company and is being applied to cross-border divisions of profit among the parent and dependent companies residents of the countries members of the European Union. Its objective is to eliminate double taxation which occurs at the distribution of profit among the parent and dependent companies. In this connection, the parent company is considered the company which has at least 20% of ownership share in the dependent company.[2] The Directive does not apply to cases in which the company resident of an EU

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[1] Manipulating with transfer pricing, or the praxis of 'parking profit', that is to assure that the profit is taxed in a jurisdiction with an as low as possible tax rate attracted the attention of the tax authorities worldwide.

[2] The so called qualifying participation (15% from 1st January 2007, that is 10% from 1st January 2003).

member, according to the regulations of the contract on double taxation avoidance concluded with a third country, is considered resident of that third country. The second refers to the Directive on mergers and acquisitions (M&A)[3] and is applied to mergers, divisions and transfers of assets and exchange of shares among the companies from two or more countries EU members. The basic point of the directive is to create conditions of a single market when companies get into business reconstruction and reorganization processes, and that at the same time the protection of financial interests of the countries members is taken care of (Kukić and Švaljek, 2007). The directive provisions will be applied only under the condition that the assets and obligations of the company transferring the assets and obligations stay truly connected with the permanent place of business of the company receiving the assets and obligations, and which is in the same EU member country where there is the transferring company and that the assets and obligations being transferred take part in the formation of profit/loss taken into account while calculating tax base. Also, the company receiving the assets and obligations is not allowed to change the tax base of the received assets and obligations, that is, the value of the received assets and obligations has to, for taxation purposes, stay the same which means that the regulations of the country where the seat of the transferring company is have to be applied, just as if the business combination has not occurred.

Although there is no precise information on the proportions of tax evasion in the EU, the estimated value is between 2 and 2,5% of EU GDP or between 200 and 250 billion EURO (Matei and Pirvu, 2011). For that reason, the EU tax administrations are increasingly monitoring the transactions, especially the financial ones, where transfer pricing occurs. In addition, the formatting of documentation about transfer pricing is required for its protection as well as the explanations of allocation principles for the risks taken over and the effects of business restructuring. In 2006, that was consolidated in the 'Codex of Behaviour' on transfer pricing documentation for harmonization purposes. In the project analysis about tax profit, the European Commission has pointed out the importance of tax problems regarding transfer pricing, and that as an issue at the level of internal market. Although the countries EU members have recognized and adopted the OECD directives for transfer pricing, their different interpretations offer scope for international debates and disputes which affects the functioning of internal market and causes additional expenses for companies and national tax administrations. Solutions for tax problems solving are defined and given within the Joint Transfer Pricing Forum are established by the European Commission in 2002 to reduce high coordination costs and to avoid double taxation often occurring with international inter-group transactions.[4] The number of EU countries which have become members of advance price agreements and joint consulting procedures has increased. Despite that, there are still EU members which do not have legislative regulations for transfer pricing sorted out (Malta) or requests submitted for the preparing of documentation (Luxemburg). The European Parliament has also put forward the possibility of introducing a jointly consolidated profit tax base which should solve the problem of double taxation and transfer pricing in the EU.

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[3] In 1997, in the ECOFIN conclusions the Codex of Behaviour was passed for business taxation in order to prevent harmful tax competition. As one of the criteria to determine tax harmful measures, there was also outlined the determination of the company profit in the multinational group pursuant to internationally accepted rules, especially those approved by the OECD.

[4] According to the estimations of the European Commissions from 2001, the expenses of transfer pricing adjustments for the European companies were 4-5,5 bill. Euro per year, that is, 1,9 % of the amount of the paid profit tax.

Challenges of the Modern World - Contemporary Economy and Globalization

Transfer pricing related to international transactions has become an important issue globally. Tax administrations have to cope with the consequences of the financial crisis leading to difficult financial burdens and losses in the chain of values, and resulting in an increasing number of conflicts to preserve the previous levels of taxable profit. In the opinion of many scientists, transfer pricing represents the best way of avoiding tax payment, that is tax evasion. Following the OECD study 'Promoting Transparency and Information Exchange for Tax Purposes' from 2010, it has been estimated that the business praxis of avoiding tax payment generates the loss of tax income in the value of 100 billion USD to the American economy, and more billion EURO for many EU countries. In the research 'A Christian Aid Report, carried out in 2009, it is estimated that the developing countries have an annual loss of 365 billion USD due to transfer pricing manipulation, so that the governments of those countries are not able to provide adequate education, health care, water supply, transport and other indispensable services.[5] Because of transfer pricing manipulation on the part of multinational companies it was estimated that Papua New Guinea lost between 9 and 17 mil. USD in 1999. In Great Britain, in the period going from 2003 to 2007, the tax authorities were implementing transfer pricing coordination which resulted in the increase of tax income of 1,1 mil. GBP, and in the period from 2007 to 2009 in an additional increase of 2,1 mil. GBP. The transfer pricing monitoring carried out in Australia enabled the tax authorities to increase incomes for as much as 2,5 bil. AUD in the period of five years until 2005. The introduction of strict monitoring of transfer pricing in China after 2005 had as a consequence an increase of tax income of 460 mil. Yuan (CNY), while in 2007 there was recorded an increase of 987 mil. Yuan of tax income (Sikka and Willmott, 2010).

If we observe Europe, most Western European countries introduced the regulation of transfer pricing except for Belgium and Ireland (up to 2010), and Norway and Switzerland. Prior to the financial crisis, the transfer pricing monitoring was increasingly carried out, and currently it is being intensified even more. In countries where the transfer pricing regimes were established much earlier, like in Great Britain, Germany and the Netherlands, those subject to profit tax encounter highly specialized tax inspection experts (PwC, 2010). The monitoring often focuses on business restructuring, the status of net operative loss and intangible assets with a highlight on the comparison of transactions with publicly accessible information. In the Eastern and Mid-European countries, the risk of transfer pricing manipulation emerged due to the opening of their economies, political stabilization, the attracting of foreign investments as well as lower tax rates and the non-existence of pricing regulation. Therefore, some improvement can be noticed in those countries, especially for the preparing of documentation which is becoming a rule. Tax inspectors do not focus any longer exclusively on transaction estimation through a contract, but also take into account the local characteristics and the reality of the business itself. The tax authorities in those countries require the preparation of specific local documentation to provide a benchmark, while some countries also require the documentation to be translated into the official language. More and more frequently, the tax authorities use the tools for information exchange stipulated in the agreements on double taxation and EU directives. In some countries like, for example, Russia and Kazakhstan the rules on transfer pricing can differ from OECD directives since the rules in those countries are valid also for the relations with disjointed parties (PwC, 2010). Otherwise, in most countries,

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[5] The developing countries are attractive destinations for foreign multinational companies' investments which represents a challenge of transfer pricing manipulation resulting in outflow of capital towards the developed countries.

the request for the conclusion of advance pricing agreements guarantees safety in intercompany transactions.

Transfer pricing is a priority issue in the USA and Canada which is why there is a greater implementation of monitoring. The USA has one of the oldest and most developed regimes regulating the issue of transfer pricing. The application of the principles of independence for transfer pricing dates from 1934, and the IRS has published additional rules over the last three decades. The IRS investigates regularly the pricing among companies and transfer pricing policies upon the tax payment of multinational companies, and the investigation becomes more extensive when there is a suspicion of an attempt to avoid tax payment. The American regulation of transfer pricing is consistent with the OECD directives for the choice of the best method, transaction methods, comparability analysis, market penetration strategies which make it possible to influence transfer pricing, principles of independence, treatment of intangible assets, services and documentation, and possible sanctions. Canada is known as a country with strong transfer pricing monitoring. CRA (Canada Revenue Agency) made one of its more significant successes in 2008 when it won a suit at the Tax Court relating transfer pricing in a dispute with a company. The USA, Canada and Mexico have been intensifying their monitoring activities over the last few years as well as the concluding of various agreements and arrangements with countries without regulated double taxation.

For two decades, Latin America was a free zone for transfer pricing regulations. Today, ten countries in that region have instituted relatively new regulations based on the OECD directives. Various tax bodies' attitude to transfer pricing is changing, except for Brazil which is not implementing the principle of independence. Mexico, Argentina and Venezuela have recorded a greater transfer pricing monitoring and also the range of tax estimations which are the result of alignment and coordination of the tax bases. Tax administrations in countries like Peru, Colombia and Ecuador are increasing internal funds for the monitoring process. Due to that, multinational companies operating in Latin America are now more than ever exposed to interrogations by authorities and are aware of the accessible instruments for avoiding disputes and conflicts among tax authorities, which generates the presence of double taxation avoidance. Most Latin American countries have signed many agreements with trading partners worldwide, except with the USA. The conclusion of advance pricing agreements is made possible for many Latin American countries, but not for Brazil and Argentina. Although the benefits of those agreements are recognized, they are still something new for those countries with the exception of Mexico which takes part in numerous unilateral and bilateral agreements.

In the countries of Asia and Pacific, because of a wide range of cross-border transactions, tax authorities are starting implementing the coordination procedures, and funds for investigation of transfer pricing from a different perspective are being increased. Also, their legislation stipulates the corresponding documentation which is useful for achieving monitoring objectives from the tax administrations point of view. Indian and Chinese tax administrations have recorded an increase in the number of transfer pricing experts, while Indonesia and the Philippines have launched the monitoring initiative. In China and India, the implementation of transfer pricing reform resulted in the increase of transfer pricing coordination and in the decrease of the number of cases, and an increase in concluded APA programmes has been recorded, while the required time for the agreement conclusion records an increase (KPMG, 2011). The tax authorities of the region Asia-Pacific were in 2010 the most rigorous authorities as for transfer pricing.

As a rule, developing countries are behind the developed ones which are more experienced in transfer pricing monitoring and have more developed regulatory rules. With the opening of their economies through trade liberalization, the developing countries generate the need for the establishment of a stable tax system being, at the same time, the foundation for the development of the legislation related to transfer pricing. Before the introduction and implementation of the transfer pricing reform the national tax system needs to meet certain preconditions and basic requirements. The preconditions can be divided into three main categories (PwC, 2011): economic, political and legislative preconditions, as well as tax administration (with the emphasis on organization and capacity). In those countries multinational companies also have a significant role and take part in one third of their domestic product. Their investments in the banking sector, real estate, mining, transport and communications are particularly significant. In order to stimulate direct foreign investments, they started the implementation of tax stimuli and special tax regimes. The countries which have introduced necessary regulatory rules have also taken into consideration the requirements for documentation. Those countries are also inexperienced as for the implementation of investigation and transfer pricing monitoring. Therefore, some general recommendations and measures have been suggested to each country, depending on the met preconditions.

The number of projects aimed at dispute solving was relatively constant until 2008, when there was recorded a significant increase of transfer pricing monitoring with the growth index of 180%. After 850 cross-border companies in 24 countries worldwide had been surveyed, in 2008 KPMG in the conducted research showed an increased importance of the transfer pricing issue. In addition, there should be mentioned an improvement in the area of conclusion of advance pricing agreements, especially for the countries of the Asia-Pacific region. Japan used to conclude a 100 bilateral APA per year, Australia and Korea about 20 and 30 respectively, while the USA concluded about a 100 APA, after which that number went to 70 APA in 2008. In Malaysia and India there have been major breakthroughs on the APA programmes. Concerning the mutual agreement procedures (MAP), in 2010 Japan and Germany had more than 250 and 500 procedures respectively, and every year the two countries solve one 100 procedures. On the other hand, the Netherlands solves 90% of procedures over the period of two years (PwC, 2011).

3   TRANSFER PRICING IN THE REPUBLIC OF CROATIA

The Republic of Croatia has adopted the OECD transfer pricing directives and has implemented them into its legislative regulations. The regulation of transfer pricing in the Republic of Croatia is relatively recent, being in existence since January 1st 2005, but in addition to that it is necessary for the transfer pricing to undergo more detailed regulation in the sense of structure and contents of the documentation, procedure of the transfer pricing control and advance pricing agreements.[6] In Croatia, there is an ever stronger impact of transfer pricing because the foreign investors (majority owners of companies, banks and insurance companies) are trying to transfer, that is to increase the profit of their Croatian branches due to the relatively low profit tax rate. For that reason, the tax administration pays more and more attention to the monitoring of transfer pricing. In addition, the Republic of Croatia has signed numerous agreements on double taxation avoidance, which determine the

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[6] In the Republic of Croatia there is no possibility, that is – there is no procedure for concluding advance pricing agreements (APA).

issue of double taxation and they also determine the affiliated companies, define transfer pricing and the principle of independence.

In 2009, the Ministry of Finance published the Guidelines for Supervising Transfer Pricing which includes the latest version of OECD directives. Expert teams of auditing houses such as PwC and Deloitte & Touche are helping out the Croatian companies reduce the risks through alignment of practical solutions for transfer pricing with overall global business operations and targets, and they also help with the strategic documentation which supports the transfer pricing praxes and solves disputes efficiently. Their services include transfer prices planning, the drawing up of strategy, policy and documentation and the tax optimization of business processes. They also check the clients' internal information and connect them to publicly accessible resources and researches with the aim of explaining the client the economic basics of the implicated intercompany transactions. That includes the checking and the risk estimation of allocations for intercompany arrangements in accordance with the industrial analysis, application of methods and instructions from the national tax rules and OECD directives. The legislative regulations in Croatia do not stipulate the concrete contents and the structure of the transfer pricing documentation and there is no procedure for advance pricing agreements. Therefore, more detailed and more specific institutional definition of transfer pricing is needed for the Tax administration to be able to implement the transfer pricing in a more serious and effective manner.

4 CONCLUSION

In today's conditions of globalization and internationalization of doing business, transfer pricing is the means of conducting transactions among the affiliated companies within the group at the international level. The use of transfer pricing makes numerous benefits possible: tax payment at lower rates, profit transfer, withdrawal of funds out of the foreign branches and their strengthening, gaining of competitive advantage in relation to non-affiliated companies and overcoming of unfavourable situations in the local market.

It is necessary to monitor and control transfer pricing to obtain the objectivity when taxing the affiliated companies. As transfer pricing has become an important issue at the global level, the tax administrations are facing a number of challenges, and more and more attention is directed to monitoring and control of transfer pricing. In order to avoid transfer pricing manipulations for the purpose of profit decrease and overflow and to protect the countries' fiscal interests, OECD has set the transfer pricing directives for multinational companies and tax administrations in order to unify the tax treatment and control transfer pricing at the international level and to minimize the double taxation of the companies. There is as well a considerable increase in the number of agreements on division of common costs, advance pricing agreements (APA) and mutual agreement procedures (MAP). Although a considerable and constant effort has been put into prevention of transfer pricing malpractice worldwide, there are still numerous countries which insufficiently control and sanction the malpractices, and that is especially the case with the developing countries. The issue of transfer pricing is still the problematic area, because it cannot be abolished, so the problem remains unsolved globally. Therefore, in the future there can be expected an even stronger competition of the tax bodies in that area, as well as their connecting with the tax bodies in other countries with the aim of determining the proper tax base.

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Challenges of the Modern World - Contemporary Economy and Globalization

A DEMOCRACY AND ECONOMIC DEVELOPMENT IN WESTERN BALKAN

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ABSTRACT

One of the key issues in empirical studies within political economy is the relations between the process of democratization and the problem of implementing market economy. Literature on the subject is abundant. Authors discuss the relations between democracy and various aspects of economy, GDP per capita, implementation of market economy, threat of bankruptcy in the financial crisis. This problem is crucial for countries transforming their economies since the process is costly in social, economic and demographic aspects. In Europe there are still countries which deal with both implementation of democracy and market economy. These are Western Balkan countries, mainly deriving from the Socialist Federal Republic of Yugoslavia (SFRY), which declared their independence in the 90. and 00.: Croatia, Slovenia, Macedonia, Bosnia and Herzegovina, Montenegro, Kosovo. After sanguinary inter-ethnic conflicts which led to breakup of the SFRY, the countries had to rebuild and heal their economies, including all institutions and implement market economy with all its pros and cons. The article addresses the issue of simultaneous democratization and transforming the economy. It does not study the relation between democracy and economic development but searches the answer to the question whether the countries which originate from the same political system and expericenced very similar economic situation in the late 90. achieved a comparable level of democratization and economic development after nearly 20-year process. The following research methods to gather the qualitative and quantitative data were used: document review, literature review and international study. The author collected various documents, reports, analyses covering the performance of the countries in scope of democratization and economic development. The review of literature is based on materials which are publicly available and include academic journals, books, conference presentations, news media articles and web sites. The study involves international literature with focus on international comparative studies.

Keywords: Democracy, Economic Development, Western Balkan

1 INTRODUCTION

The problem of the relation between democracy and the process of implementing market economy has been discussed for a long time. The vivid discussions among economists and policymakers concern various aspects of the problem: whether democracy improves the economic growth or if the process is contrary, meaning that market economy is the precondition for the democratization processes. Researchers study the correlation between democracy and various aspects of economy, i.e. GDP per capita, implementing market economy or the threat of bankruptcy in the financial crisis.

The study of this complex problem is crucial for countries transforming their economies since the process is costly in social, economic and demographic aspects. In Europe there are still a few countries which have not reached the market economy. These are Western Balkan countries, originating from former Socialist Federal Republic of Yugoslavia. The countires are on different stages of democratization process as well as the economy trasformation.

The article addresses the issue of simultaneous democratization and transforming the economy. It searches the answer to the question whether the countries which origin from the same political system and experienced very similar economic situation in the late 90. achieved a comparable level of democratization and economic development after almost 20-year process.

There following research methods to gather the qualitative and quantitative data were used: document review, literature review and international study. The author collected various documents, reports, analyses covering the performance of the countries in scope of democratization and economic development. The review of literature is based on materials which are publicly available and include academic journals, books, conference presentations, news media articles and web sites. The study involves international literature focused on international comparative studies.

2 INTERDEPENDENCE OF DEMOCRACY AND ECONOMIC DEVELOPMENT – LITERATURE REVIEW

Although there is no one general definition of democracy, the literature provides the list of its features. Democracy includes organization, principles, culture and behavior. Kimber (1989, pp. 199–219) names a few norms that are required by the democracy. These are upward control, political equality, and social principle. Since ancient times democracy has been described by its crucial features, among which the most important ones are equality and freedom (Piotrowicz and Szymańska, 2003, p. 230). They are reflected in the fact that all eligible citizens are equal before the law and have equal access to legislative processes, as well as citizens' freedom is secured by legitimized rights protected by a constitution (Dahl et al., 2003, p. 35). The literature also points out that the democracy leads to transparency and far-sighted environment of economic activities and supports stability, which is the precondition for expansion of the economic activities.

And economic stability is a key issue during the process of market economy implementation. Therefore, the problem of the mutual relations between political regimes and economic development has resulted in a vivid discussion in the scientific literature. Two contrary views clash in an extensive discussion. On one hand, some authors believe that efficient functioning of economy without democracy is possible, on the other hand – there is a group of researchers who believe that the democracy is the key determinant to guarantee the economic growth. According to J. Kornai (1998), investors appreciate stability of democracy as well as stability of a dictatorial rule. The most disincentive economic system – from the investors' perspective - is a weak democracy since it does not ensure stability. The examples to illustrate the idea are: the annual economic growth of 6% in Bulgaria between 50-ies and 60-ies or the period between 1976 – 1998 in China with annual economic growth of 8%. Other examples are: favorable economic situation in Spain during the rule of Franco or in Chile while Pinochet was the President. A very similar view is presented by Gerring et al. (2005, pp. 323–364), who believe that a positive influence of democracy on GDP increase is arguable. The authors state that quick economic growth is also possible in countries with authoritarian political systems. Simultaneously the opinion of favorable indirect effect of democracy, thanks to greater stability or more extensive property rights, is not rejected.

A contrary opinion is presented by Olson (1993, pp. 567–576) who points out that democracy provides security of property and contract rights. He states that autocracies will rarely gain a good economic performance for more than one generation. According to Nelson (1994, p.

105), democratic organizations and activities affect the economy and capability to grow in multidimensional way. A very close view have Clague et al. (1996, pp. 243–276) stating that democracy is better to protect property rights and it provides more incentives to investment, which leads to the conclusion that democracy determines economic well-being. The opinion that democratization goes together with growth is supported by Robert J. Barro (1999, p. 160), who claims: "Increases in various measures of the standard of living forecast a gradual rise in democracy. In contrast, democracies that arise without prior economic development … tend not to last." According to Kołodko (1999), there are some major issues to discuss here. They are freedom that must be connected with business and democracy, which creates foundations for effective economy and supports the ability for expansion. The freedom is understood as capacity to decide about purchase and sale, manufacture and competition, savings and investments. It is a force driving towards economic growth. In this context, development policy and market mechanics are complementary factors. Democratic governance and market discipline are elements of the mix which enables sustainable increase of economy. In 1960 only 37 countries could be described as democratic. In 1998 the number tripled – 117. There is a positive correlation between development of democracy and acceleration of economic growth during the last decades of the 20th century.

Among advocates of the relation between level of democracy and economic growth there is no consensus on direction of this link. Heo and Tan (2001, pp. 463–473) study the issue in 32 developing countries. The results of their survey lead to equivocal findings: it is as likely that economic growth supports democracy as that democracy supports economic growth.

There are various surveys on this interdependence carried out in different countries. Narayan and Smyth (2006, pp. 81–98) consider the relations between democracy and economic growth in China in a long and short term. Their study confirms that in the long run the lack of democracy in China has had a statistically significant negative effect on real income, while in the short run democracy has had a statistically insignificant effect on economic growth. Their findings suggest that in the long run growth in capital, labor and democracy influence positively granger cause economic growth, while in the short-run there is mutual positive influence between democracy and economic growth. Mahmood et al. (2010, pp. 77–86) examine the possibility of links between democracy and economic growth in Pakistan. This study aims to find out whether or not a type of regime affects economic growth . Their findings demonstrate that democracy plays a noteworthy role in the economic prosperity in Pakistan.

There is another group of authors claiming that it is economic growth that conditions democratic changes. For example, Helliwell (1994, pp. 225–248) studies this problem in 125 countries in the period of 25 years between 1960 and 1985. He concludes that countries at higher income levels are more likely to have democratic forms of governments. Persson and Tabellini (2006) support the latter opinion that richer countries are generally democratic and there is no evidence that democratization yields consequent economic growth.

3 DEMOCRACY AND ECONOMIC DEVELOPMENT DURING ECONOMIC TRANSFORMATION

Regarding the nature and speed of changes, both in political and economic systems, studies carried out on democracy and economic development lead to the opinion that during the process of economic transformation there is a feedback between these two aspects. The study carried out by Freedom House (Shor, 1997) supports this assumption. It concerns complex

aspects of both changes which could be witnessed in 25 countries. In the study, democratization process was described by various elements, like electoral freedom, political pluralism, citizens' participation in public life, labor unions' autonomy, independent media, national democratic governance; legislative and administrative transparency. For economic changes the following factors were considered: privatization process, property law, independent central bank and freedom of market entry.

According to Williamson (1993, pp. 1329–1336) the more sophisticated market system is, the faster democracy is implemented. But at a certain stage, the process reverses – democracy supports further economic growth. It leads to a conclusion that when the economy grows, it is easier to achieve the positive feedback between both processes. The more economy grows, the more advanced democratization is.

During economic transformation mutual interdependence between democracy and economic development is evolving. A few elements play a key role for economic growth in this process: freedom of entering the market and liberalization of regulations, allocation of resources towards private sector that improves its efficiency, and privatization.

Some authors claim that better economic output during transformation can be linked to culture rather than economic factors. Progress within culture character of democracy can be achieved by model of "learning by doing". A new model of culture behaviors and a new model of policy-making are essential in this process.
Economic democracy means:
1. freedom of entering the market
2. involvement of employees into decision-making process (Nuti, 1998, pp. 7–16),
3. territory administration decentralization
4. minimum wage policy and minimum income policy.

Economic democracy can also be associated with factor which is essential for allocation to be more effective and "pro-growth". All these elements play a key role in shaping relation between implementing democracy and introducing market economy.

4 DEMOCRACY AND ECONOMIC DEVELOPMENT IN WESTERN BALKANS

After the World War II the SFRY was a republic which consisted of six provinces: the Socialist Republic of Bosnia and Herzegovina, the Socialist Republic of Croatia, the Socialist Republic of Macedonia, the Socialist Republic of Montenegro, the Socialist Republic of Serbia and the Socialist Republic of Slovenia. Till 1980 the country was governed by Marshal Josip Broz Tito. Thanks to his strong political leadership, and the estrangement from the USSR in 1948 the SFRY could expect support via the Marshall Plan from the West. Tito with a hard line on government ruled in a dictatorial way. The SFRY was constructed by the communists as a formally federal country but stayed outside the Soviet bloc.

The country had always been a home to a very diverse population, both in terms of national and religious affiliations. Two biggest national groups were Serbs and Croats respectively accounting for almost 40% in 1971 (over 36% in 1981) and over 22% (almost 20% in 1981). The other 28% in 1971 (30% in 1981) consisting of 4 dominating groups: Muslims, Slovenians, Albanians and Macedonians. Last but not least came the fifth group with a tiny share of over 1% - Montenegrins. Religious differences among Orthodox Christian Serbs, Catholic Croats, and Muslim Bosnians and the rise of nationalism contributed to the collapse

of Yugoslavia. (Kubiszewska, 2013) In the 80. in consequence of inter-ethnic conflict which developed into open war the former Republics of the SFRY declared their independence: Croatia, Slovenia and Macedonia (in 1991), Bosnia and Herzegovina (in 1992), Montenegro (in 2006), Kosovo (in 2008). After sanguinary conflicts the countries needed to heal their economies and had to rebuilt all institutions and implement market economy with all its pros and cons. These countries present different attitude towards access to the European Union (EU). After Slovenia, Croatia is the second country, to enter the EU in 2013. Serbia declares the will to start negotiations with EU, therefore it is interested in clarifying its relations with Kosovo. In 2012 Serbia became the official candidate to the EU. Although Montenegro presents officially its will to continue the negotiations with the EU, the country has made little to improve the citizens' rights and justice system, which are of key importance.

The research carried out by Freedom House is based on analysis of a several aspects of democratization, which involve independent media, electoral process, civil society, national and local democratic governance, judicial system independence and corruption level. The overall scores show that between 2002 and 2011 the process of democratization is being supported and implemented in the selected countries. Bosnia and Herzegovina together with Serbia achieved the best scores in 2007. In 2008 both countries carried out elections: parliamentary in Serbia and local in B&H. The results did not change much in public policy, furthermore - in B&H the democratization process was withheld. Interestingly, though the situation in 2011 seems to be much better than a decade before. B&H has witnessed the considerable progress in democratic reform comparing to other countries.

The remaining countries also went through a periodical slowdown what was caused by unstable political situation. According to data gathered by Heritage Foundation, exceptional positive progress is visible in corruption decrease in Bosnia and Herzegovina, Serbia and Montenegro. They also achieved visible progress in democratization, which is presented in the Chart 1.
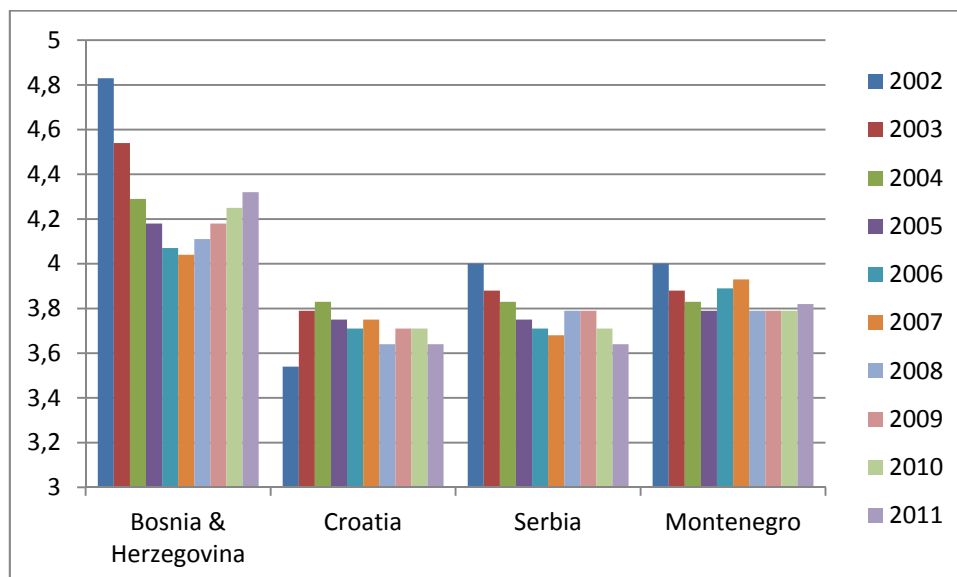
Chart 1: Democratization in selected Western Balkan countries (Author's calculation based on Nations in Transit 2012, Freedom House, 2012)

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According to the authors of the report Bosnia and Herzegovina is described as transitional governance and the other countries as recognized as semi-consolidated democracies. This leads to conclusion that situation in respect of democracy in Croatia, Serbia and Montenegro is relatively similar, while Bosnia and Herzegovina still fails in this process.

When the economy is considered, the situation will be presented from two perspectives: GDP per capita and quality of life presented in Charts 2 and 3, respectively. Both indices illustrate the economic growth. GDP indicates the increasing value of economy and index of life quality shows the situation of households. To present progress in implementation of the market economy, the index of economic freedom will be used (Chart 4).
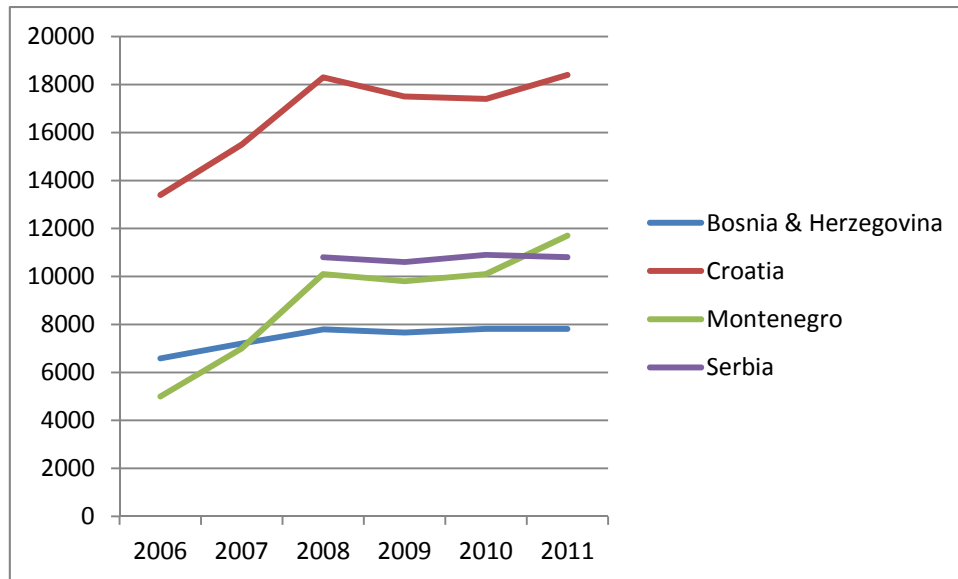
Chart 2: GDP per capita in selected Western Balkan countries (in USD) (Author's calculation based on CIA World Factbook)
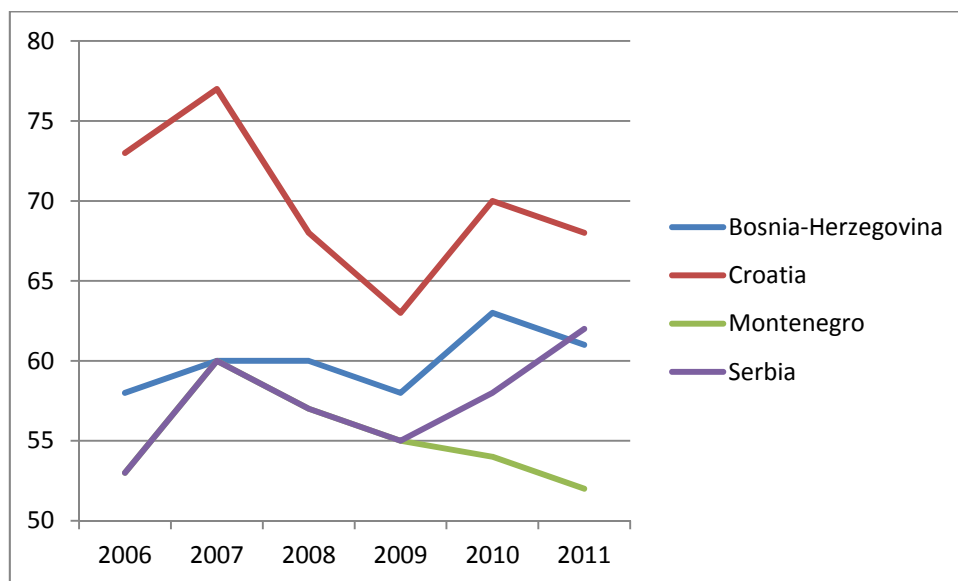
Chart 3: Quality of life in selected Western Balkan countries (Author's calculation based on International Living's Quality of Life Index, 2011)

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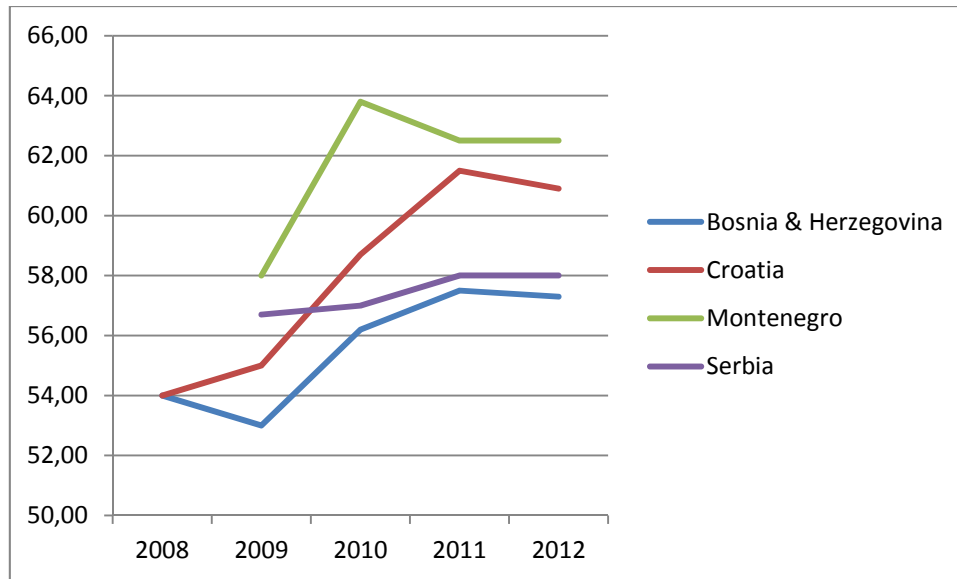
Chart 4: Economic Freedom score in selected Western Balkan countries (Author's calculation based on Economic Freedom score Heritage Foundation, 2012)

GDP per capita is based on data from CIA World Factbook. Annual life quality index prepared by IL magazine (www.http://internationalliving.com) takes into consideration various aspects of living, like cost of living, culture, economy, environment, freedom, health, infrastructure, safety and risk and climate. The higher the score, the better the living conditions in a country. Economic Freedom score has been elaborated by Heritage Foundation (http://www.heritage.org) and the Wall Street Journal and presented since 1995. There are 10 factors which are included in general score and which statistics are based on data from the World Bank, the International Monetary Fund and the Economist Intelligence Unit. The factors are business freedom, trade freedom, monetary freedom, government size/spending. fiscal freedom, property rights, investment, , financial and labor freedom, freedom from corruption.

The economic data confirm that the best economic situation among the selected countries is observed in Croatia. Economic freedom reaches the highest scores as well as GDP per capita is much higher than in neighboring countries. This leads to reasonably better living conditions.

Situation in other countries is similar. Although GDP per capita in B&H is slightly lower than in Montenegro and Serbia, overall quality of life is scored higher. It must be mentioned that due to favorable institutional reform in B&H back in 2006 this country reached level of economic freedom similar to the one in Croatia. Regrettably, because of later unstable political situation this effect has not improved.

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Table 1: GDP growth in % (Author's calculation based on Eurostat and IMF data)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bosnia & Herzegovina	2,36	5,05	3,86	6,26	3,87	5,95	6,12	5,58	2,91	0,72
Croatia	3,66	4,88	5,37	4,13	4,28	4,94	5,06	2,17	-5,99	-1,19
Montenegro	1,10	1,90	2,50	4,40	4,20	8,60	10,70	6,90	-5,70	2,50
Serbia	5,30	4,30	2,50	9,30	5,40	3,60	5,40	3,80	-3,50	1,00

Balkan countries experienced the growth of GDP between 2002 and 2007 reaching the level of over 10%, as it is presented in the Table no 1. According to the IMF (2009), the nominal GDP of Montenegro was 4.822 billion USD in 2008. GDP grew at an impressive pace of 10.7% in 2007 and 7.5% in 2008. According to Eurostat data (2009), the Montenegrian GDP per capita stood at 46% of the EU average in 2008 that was the first year of the decrease. All three graphs show the decline of indices in 2008-2009. One year after the crisis all Balkan countries experienced decrease of GDP. Croatia suffered most, as the GDP declined in 2009 by almost 6% y/y. Year 2009 turned out to be the first year when Montenegro experienced dramatic drop in GDP. In the consequence of global crisis, Montenegrial GDP dropped by 5.3% in 2009. The country was expected to exit the recession in mid-2010, with GDP growth predicted at around 0.5% (Tanner, 2009). Successfully at the end of 2010, GDP growth reached the level of 1,1% y/y.

Another consequence is the decline of GDP per capita, presented in Chart 2. The changes influenced the quality of life and economic freedom, which indices dropped in 2009. In 2010 the slight improvement of situation was noticed.

5 CONCLUSION

The review of the literature shows that the problem of mutual relations between democratization process and market economy implementation is very complex and up-to-date. The studies imply that there is correlation in both ways: from democratization to economy growth and reversely. There is evidence that it is possible for economy to grow in other than democratic systems. Yet, it must be emphasized that although democratic procedures support rational economic activities they do not ensure them.

This problem is exceptionally important during political and economical transformation, because a change of these systems brings high costs for the society, both in social and financial aspects.

The analysis presented in the article shows that the countries which originate from the same political and economic background can achieve different results. The various conditions of development, like economic potential, attitude to the EU access influence the final score. The best situation, both in democracy and economy aspects, is in Croatia. The country is recognized as the economic tiger of the region achieving the best ranks in the regional ratings. Although the situation in Bosnia and Herzegovina seems to be the worst, both in political and economical fields, it must be stressed that the country has made the most impressive progress.

During an economic transformation, political disputes and conflicts are much more intensive than the ones in established democratic systems. It must be emphasized that despite many

disadvantages and huge costs of transformation process, there is no post-SFRY country where either process of democratization or market economy implementation would be given up. There might appear some delays in introducing institutional reforms, but the processes have never been abandoned (Kołodko, 1999).

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DEVELOPMENT OF MECHANISM FOR RATIONAL USE OF THE UNIVERSITY'S HUMAN CAPITAL IN INTERNATIONAL PROJECTS

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ABSTRACT
Integration of national vocational education into international educational community and entering into international market of educational services raised the task of promoting international cooperation of Russian universities. The main purpose of international activities in the field of higher education, as well as that of scientific and technical ties, is a full-scale integration of Russia, as an equal partner, in the global educational environment, improvement, and building the prestige of the national education system based on international experience. Due to the nature and specifics of the educational institutions of higher education the most important condition for success of international projects is human capital. New priorities determine the necessity of transition towards student-oriented approach to high-school management and require that managers and researchers address the intellectual capital of the faculty as one of the most important factors in the competitiveness of the university. Many scientific studies are carried out within the framework of large-scale programs funded by the state or the community of nations in the form of joint projects and, for the most part, by using the potential of the multinational consortium. Participation in intentional project suggests that the scientists possess certain competencies to establish long-term contracts with foreign partners. Due to high spiritual, intellectual and creative content of work, the faculty becomes the main competitive wealth to help achieve the strategic goals of the university. Analysis of the level of human capital development and comparative analysis of secondary employment allow finding out the disadvantages of using the human capital of the higher education institution and identify the areas to address these deficiencies, which affects the efficiency of international projects at the university. The extent, to which the human capital of the higher education institution is utilized, can be evaluated using the methodology developed by the author, which includes an assessment of key criteria such as competence, adaptability, and corporatism.

Keywords: *Evaluation of human capital, Human capital, Intellectual capacity, Organisational and economic factors*

1 INTRODUCTION

In the second half of the 1980s and early 1990s the new concepts of economic growth based on the ideas of human capital accumulation emerged. Theodore Schultz and Gary Becker defined human capital as an important factor of economic growth, which is regarded as a category that includes items such as a stock of professional knowledge and skills, congenital

and acquired abilities, motivation, energy, and health that an individual uses in his/her work. In the post-industrial (innovative) society financial capital superseded human capital, which is viewed from the perspective of a strategic resource. Assessing the current state and evolution of the high school the last decade, it should be noted that the trends in its development are driven by the process of integration of education, science, industry, and business, and serve as the basis for innovative development of society. Specifics of formation, use, and development of human capital in the sector of higher education at present is that expansion of opportunities has increased the responsibility of educational institutions for performance results and meeting the demands of the labor market, and the degree of professional training directly depends on the quality of the employees of educational institutions.

Higher vocational education is an integral part of Russia's innovation system, which is necessary for development of proactive training and retraining for innovation across the whole national economy. This requires constant reproduction of the human capital of the higher education itself, creating scientific and educational base for the teaching of subjects that form the framework for the formation of an innovative creative thinking in graduates.

The strategy of socio-economic development of the Russian Federation up to 2020 sets the task of transition of the economy to an innovative way of development, placing it on the path of rapid and sustained growth based on advanced technologies. At present, modern, high-quality education directly contributes to building a society with highly developed economy. Human resources are the most important intellectual and professional resource for socio-economic development of the country, region, and enterprise. The transition to innovation model of economic development is impossible without modernization of higher education.

Integration of the national vocational education in the global educational space and entering the international market of educational services made relevant the task of promoting international cooperation of Russian universities. Main goal of international activities in higher education, as well as that of scientific and technical communication, is the full integration of Russia as an equal partner into the world's educational space, improving and strengthening the credibility of the national education system based on international experience. Due to the nature and specifics of the educational institutions of higher professional education the human capital becomes the most essential condition for success of international projects. Because of high spiritual, intellectual and creative content of work the faculty is becoming a major competitive asset helping to achieve the strategic goals of the university.

Transition of Russian universities to the mode of stable strategic development is determined by their capacity for innovation, quality of educational and research processes, and ability to create new products that meet the requirements of the market. The ability of universities to bring about innovations and innovation activities depends on the level and degree of development of its innovative potential. Formation of innovative potential of high school is the result of interaction between the elements of external and internal environment of an educational institution. The author's block diagram of an institution's innovative potential is presented in Figure 1.

2   THE HUMAN CAPITAL OF HIGHER EDUCATIONAL INSTITUTION

Human capital in the innovation capacity of the higher educational institution is considered by the author as a combination of physical, intellectual, and social properties inherent to the

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human resources of the organisation, form a part of its employment potential and intellectual capital, and are used in its innovation activities and provide revenue to the owners of these properties through creation of new valuables.

Managing human capital of the organisation, one should assume that technological progress leads to cyclical renewal of all the factors and elements of production. The purpose of the organisation's management in these conditions is to minimize the proportion of unused potential of employees. In general, human capital management involves three main phases: formation, development and use.

New priorities need to define the transition to student-oriented approach in management of higher education and require managers and researchers to refer to the intellectual capital of the faculty as one of the most important factors in the competitiveness of the university. The utilization of intellectual capital is determined by the scope of university research, teaching methods, and extracurricular activities that are necessary to achieve the required standards of education, consumer demand, and international projects. Many scientific studies are carried out within the framework of large-scale programs funded by the state or the community of nations in the form of joint projects and, more often than not, by multinational consortia. Participation in international projects calls for certain competencies in academic staff to establish long-term contacts with foreign partners.

Innovative development of the university is based on new scientific research and its introduction to the economy. The education system in an innovative higher education institution should be open to new scientific research and modern economy. Substantial rise of the level of university research, ensuring its relationship to the economy, can and should be enhanced through the creation of conditions for implementation of the projects.

To assess the level of human capital a study of the level of satisfaction with the organisational and economic conditions of work motivation for the faculty of the university was used.

2.1   Research methods

Author proposes to assess the conditions for formation, development, and utilization of human capital C hc by using following formula:

$$Chc = C_1\alpha_1 + C_2\alpha_2 + C_3\alpha_3 + C_4\alpha_4 + C_5\alpha_5 + ... + C_{10}\alpha_{10},$$

where $\alpha_1...\alpha_8$ are weighting the coefficients of significance of conditions for human capital utilization, defined by an expert.

where C_1 – level of qualification of staff; уровень квалификации сотрудников;

C_2 – cooperation agreements with enterprises;

C_3 – competitiveness of the university;

C_4 – carrying out conferences and seminars and their level;

C_5 – collaboration of faculty. Research teams of the university;

C_6 – presence of cross cultural communication skills

C_7 – research and pedagogical internships

C_8 – motivational potential of the university's staff;

C_9 - signed agreements with international partners;

C_{10} - applications for international projects

Distribution of satisfaction coefficients (C sat), and significance (C sign) of the weights of components (α) by groups of organisational factors is presented in Table 1.

For assessment of the level of human capital the author proposes to consider the criterion of competence as the most important because indicators of this criterion are influenced by the level of two other criteria: creativity and corporatism. The levels of creativity and corporatism are in direct proportion to each other and, in this particular case, have an equal impact on the level of human capital development.

Offered evaluation system makes it possible to determine the deficiencies in utilization of the human capital and outline the measures needed to eliminate such deficiencies, i.e. the ways of its most full development and universal use.

Applying the proposed methodology, the author evaluated the level and outlined the direction of development of human capital in international projects using the example of such institutions of the Samara region as Samara State Technical University, Samara State Economic University, and the Samara State University of Telecommunications and Informatics.

2.2 Results

As a result, the assessment of each criterion produced the following conclusions.

Competence. Analysis of the job and the qualification structure of the faculty shows the training opportunities, and thus possibly higher social status and self-esteem level. The increase in income encourages the employee and stimulates the desire for self-education and self-realization.

Adaptability. Considering the dynamics of R & D carried out we can talk about the demand for services. Material reward received by the employees from the administrative structures, demonstrates the interest towards scientific developments and also promotes self-esteem and academic status of the employees. The number of patents awarded, the amount and level of publications of research results indicate effectiveness of scientific research personnel in the framework of international projects.

Corporatism. Having analyzed the activities in implementation of international projects in terms of level of human capital and their influence on the state of the higher education institution's team as a whole, it can be concluded the result was positive. This is reflected in established stable structure and the results of joint research work of teachers and students.

Table 1: Distribution of the coefficients of satisfaction (K sat), and the importance (K sign) of the weights of components (α) by criteria groups

Criteria	Samara State Technical University			Samara State Economic University			Volga State University of Telecommunications and Informatics		
	C sat	C sign	α	C sat	C sign	α	C sat	C sign	α
Criterion № 1 **Competence** describes the possibility to increase the level of human capital in implementation of the international projects									
Staff's qualification level	0,63	0,87	0,064	0,58	0,88	0,064	0,68	0,88	0,064
2. Agreement on cooperation with Russian enterprises	0,79	0,71	0,104	0,93	0,77	0,104	0,70	0,84	0,104
3. Agreements with international partners	0,65	0,73	0,12	0,55	0,53	0,22	0,45	0,33	0,12
4. Competitiveness of the university	0,53	0,68	0,09	0,53	0,68	0,09	0,42	0,48	0,09
Criterion № 2. **Adaptability** characterizes creativity and flexibility of staff in implementation of international projects									
5. Conferences and seminars and their level	0,44	0,75	0,08	0,42	0,83	0,08	0,89	0,60	0,08
6. Motivational potential of university staff	0,74	0,71	0,06	0,71	0,74	0,06	0,54	0,64	0,06
7. Applications for international projects	0,39	0,89	0,067	0,45	0,85	0,053	0,36	0,89	0,05
Criterion № 3. **Corporatism,** characterized by development of research teams									
8. Research and pedagogical internships	0,32	0,98	0,071	0,27	0,98	0,071	0,27	0,98	0,071
9. Collaboration of faculty. Research teams of the university;	0,54	0,50	0,072	0,54	0,46	0,072	0,54	0,46	0,072
10. Presence of cross cultural communication skills	0,40	0,81	0,037	0,31	0,88	0,037	0,40	0,55	0,037

Summary results are presented in Table 2.

Table 2: The results of assessment of the human capital level for international projects at the university

Name of the university	Criteria										Chc
	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8	C_9	C_{10}	
Samara State Technical University	1,02	1,01	1,11	1,13	1,15	1,07	1,25	1,46	1,22	1,54	2,35
Samara State Economic University	1,05	1,23	1,02	1,13	1,36	1,14	1,26	1,17	1,11	1,65	2,25
Volga State University of Telecommunications and Informatics	1,01	1,16	1,19	1,21	1,56	1,08	1,26	1,20	1,12	1,54	2,11

3 RECOMMENDATIONS

To reveal the organisational-economic mechanism of the human capital management in the university through development of motivation it seems to be necessary to give a description of the relationship implemented inside the phases (Fig. 1).

The first phase detects the need to develop innovative potential of higher education institution and forms a strategy for its development. To do this it is advisable, at the evaluation stage of the innovation capacity of universities, to return to the stage of the development strategy of the university, build on the results of the analysis, correct the direction of change in transformation strategy, and articulate the main goal and objectives. This provides feedback between the first and the second stages.

High reliability of evaluation of innovative capacity determines the timeliness and competence of management decisions. As a rule, the assessment of innovative capacity is ambiguous and time consuming, and therefore may require additional diagnostic studies of the components of the internal environment of an educational institution, which ensures the feedback between the third and second stages.

The implementation phase of the effort to develop an incentive system of employment of human resources may necessitate the improvement of the program for the purpose of additional measures, the need for implementation of which has become apparent only at the stage of practical implementation of the measures.

Also, stage of arrangements may reveal the need for additional diagnostic work to supplement or clarify the strategy for developing human resources. Recently, very common references are made to the fundraising programs, which develop at least in the following areas: development and promotion services for graduates, development and promotion services for employers, building communities of business partners of the university. Carefully thought-out system of fundraising

in an educational institution can not only be a powerful source of co-financing, but also ensure the effectiveness of institutions in the labor market and education due to the feedback it gets from business, government, and its graduates.
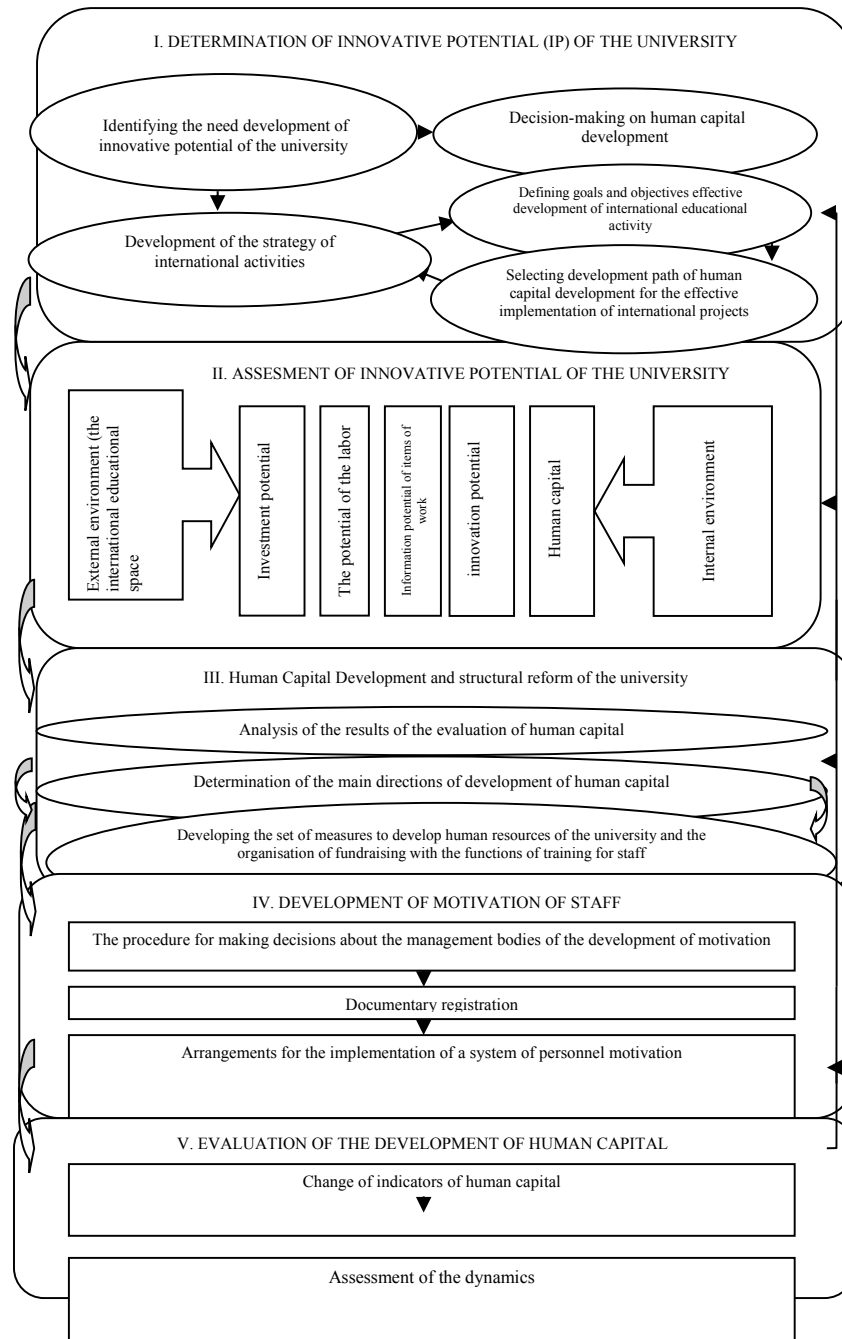
Figure 1: Organisational - economic model of development of innovation potential of higher education institution

This is exactly the approach which allows the university to play its role of "social lift" for students and graduates in the best way, thus providing a source of constantly renewed national elite of Russia.

At the last stage, which provides the assessment of the results of innovative potential of higher education institution, you may need to repeat or conduct a more thorough activity to develop and implement a system of personnel motivation. Therefore, it is expedient to define the relationship of the fourth and fifth stages.

4 CONCLUSION

Using the proposed method, we can analyze and assess the extent to which the human capital is used as a result of the implementation of international projects. Annual analysis of the level of human capital development and comparative analysis of secondary employment allows determining the disadvantages in use of the human capital of higher education institution and identifying the areas to address these deficiencies, which affects the efficiency of the implementation of international projects in higher education institution.

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TRANSITION AND PERSONAL INCOME TAXATION: CASES OF SELECTED WESTERN BALKAN COUNTRIES

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ABSTRACT

This paper deals with the issue of transition and personal income taxation based on the 'flat tax' model. Unlike most transition countries, Western Balkan countries faced transition at the end of 20th and beginning of 21st century which brought about a new set of taxation related issues. In most literature, this mainly refers to the fact that former transition countries (primarily the Baltic States and Slovak Republic) that applied the 'flat tax' have set personal income tax rates quite high whereas Western Balkan countries have been 'racing to the bottom' in regards to personal income tax rates. Three 'flat tax' Western Balkan countries will be analysed: FYR Macedonia, Montenegro and Bosnia and Herzegovina. Based upon the experience of former transition countries in transformation of the personal income tax system, suggestions and recommendations for a successful tax reform will be given. Even though it might seem straight forward, further analysis of the three Western Balkan countries show that general recommendations cannot be given easily. This mainly refers to the fact that all three Western Balkan countries have been facing high unemployment rates and high labour costs. Both facts highlight the significance of a successful personal income tax reform as well as tax reform in general especially in the last few years.

Keywords: Elasticity of Personal Income Tax, Flat Tax, Tax Wedge, Transition

1 INTRODUCTION

A generally accepted milestone regarding the beginning of the transition and hence the establishment of transition countries started after the fall of the Iron curtain in the late 1980's. Since there are many perspectives from which transition can be defined (social, economic, political, etc.), definition of a transition country in this paper will refer to an economy which is changing from a centrally planned economy or a socialist state[1] to a free market or market oriented. In literature, the Washington Consensus is a milestone when discussing the beginning of the transition process. Even though Washington Consensus emerged from a different set of conditions, it argues that 'one-size-fits-all' market-oriented reforms are appropriate to any setting, including the post socialist transition countries.

Economists around the world tend to define transition countries as 'emerging market economies' (Svejnar, 2001, p. 32) or 'New European Union members' or 'New Member States (NMS)', all the countries analysed will be referred to as transition countries. This is mainly due to the fact that not all transition countries analysed started transition period at the same time (e.g. ex Yugoslav countries due to Yugoslav war) even though most gained independence in early 1990's. For most European transition countries which are analysed in this paper, transition ended or will end when they join(ed) European Union (hereafter: EU). However, due to complexity of transition, and no clear-cut line when the transition ends, most countries still face problems related to (pre) transition period which can easily be seen in the past few years caused by global financial turmoil. Moreover, external factors such as

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[1] This refers to former Yugoslav states.

globalisation affect the success of transition. What remains explicit regarding transition is that all transition countries undergo economic liberalization and macroeconomic stabilization. Macroeconomic stabilization, inter alia, meant that high level of inflation should be brought under control, but also that privatization and restructuring should take place in order to create a financial sector and move from public to private ownership of resources. These changes lead to increased inequality of incomes and wealth, dramatic inflation and a fall of GDP (Tanzi, IMF, 1999).

According to Havrylyshyn and Wolf (1999), transition implies:
- liberalizing economic activity, prices, and market operations, along with reallocating resources to their most efficient use;
- developing indirect, market-oriented instruments for macroeconomic stabilization;
- achieving effective enterprise management and economic efficiency, usually through privatization;
- imposing hard budget constraints, which provides incentives to improve efficiency;
- establishing an institutional and legal framework to secure property rights, the rule of law, and transparent market-entry regulations.

Hence, transition is a challenging period for any country. Strategies offered and implemented by the policymakers in the transition countries took two forms: the so called 'big bang' reform vs. gradual reform (Svejnar, 2001, p. 4; Vazquez-Martinez and McNab, 2000, p. 21). The 'big bang' reform concentrated on macroeconomic stabilization, price liberalization and dismantling the institutions of the communist system. Not surprisingly, in terms of the speed of the radical reforms, this approach is often referred to as the 'big bang' or 'shock therapy' view of transition (Turley, 2006, p. 2). Moreover, Tanzi suggested that tax reforms in such countries cannot be "big bang" solutions since the required changes, "even when mistakes are avoided, they cannot be made overnight" (OECD, 1991, p. 21). The macroeconomic strategy emphasized restrictive fiscal and monetary policies, wage controls, and in most cases a fixed exchange rate. Moreover, the focus of the reform was on price liberalization, apart from energy, housing and basic consumption goods which mainly remained controlled along with wages and exchange rates. This strategy proved to be relatively sustainable in the Baltic States, some countries of the former USSR and the Balkans (Svejnar, 2001, p. 5). The gradual reform focused on the development and enforcement of laws, regulations and institutions that would ensure a successful market-oriented economy (e.g. Slovenia). These included privatisation of the state-owned enterprises, banks, etc.

Regardless of what transition strategy a country chooses, all transition countries faced the same transitional problems. The size and scope of these issues may differ and might be strengthen or eased by the chosen type of reform. According to Tanzi, in the transformation process from centrally-planned to market-oriented economy, transition countries will most certainly face a fall in GDP[2], a fall in tax revenues and hence a fall in ratio of tax revenue to GDP (Tanzi, IMF, 1999).

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[2] Special care is needed when GDP prior to tax reform is discussed since all centrally-planned economies used a measure of 'gross material product' as a measure of GDP. This measure excluded the production of services. Yugoslavian statistical office used the same measure (Svejnar, 2001, p. 9; Yugoslav Statistical Yearbook, 1991).

2   TAX REFORMS IN TRANSITION COUNTRIES

Transformation that transition countries have to undertake includes a number of reforms in all areas. Reforming a tax system is just one task put in front of transition countries. In addition, reforming a tax system is a challenging task for both developed and transition countries. Raghbendra (1998, p. 384) highlights general characteristics of tax reforms:

- significant reduction in the top rates of a certain tax
- remarkable reduction in the number of slabs in the tax scale
- broadening of the tax base
- changes in the tax mix: the reduction of one specific tax can be compensated by the rise of other sorts of taxation
- strengthening of the tax administration.

Highly felt dissatisfaction with existing tax systems is a starting point for tax reforms in any country, developed or transitional. Dissatisfaction can result from serious disincentive effects from high marginal tax rates on savings, entrepreneurship and labour supply, failure of reducing or eliminating inequalities of income or wealth, drastic political changes, complexity of the existing system in administrative terms and greatly exaggerated governmental taxing and spending. Basically, tax system cannot fulfil the functions of the fiscal system so reform is needed. For example, Blueprints for Basic Tax Reform in the USA or Meade Committee and Mirrlees Report in the United Kingdom are documents which evident the need for tax reform in developed countries. In case of transition countries, such documents unfortunately do not exist, but rather suggestions and recommendations from the IMF staff or the World Bank staff.

All transition countries had to undertake serious set of reforms in the area of taxation. For most transition countries the contraction in output in the early stages of transition led to substantial decline in the traditional tax base and as a result, government tax revenues fell sharply. In most transition economies, "private sector started growing, other sectors were declining, (e.g. agriculture) but overall due to tax administration weaknesses, including various exemptions that eroded the tax base and the failure to bring a large portion of informal sector into the tax net, tax revenues fell" (Stepanyan, 2003, p. 10). As early as 1991, Tanzi dealt with the issue of the tax system of transition countries by focusing on the structure of the tax revenues before the reform. Tax systems in centrally-planned economies could not survive due to the liberalization of prices and of the methods of payments, the privatization of state enterprises and a large increase in private sector activities especially in the service area (OECD, 1991, p. 21). Moreover, the level of tax revenues to GDP in transition countries were significantly lower than in developed countries (see Tanzi, 1991, p. 3).

A fall in tax revenues to GDP is a signal to undertake a tax reform in both developed and transition countries. Unlike developed countries, in transition countries, tax reforms were designed and implemented as a part of an overall transformation process. According to Mitra and Stern (2003, p. 21−22), tax reforms in transition countries lead to:

- a fall in the tax revenue-to-GDP ratio, a significant part of which was accounted for by a decline in revenue from the corporate income tax, the latter arising from the loss of revenue from profits of publicly-owned enterprises (McKinnon, 1991);
- a fall in the public expenditures to GDP ratio caused by the need to reduce fiscal deficits in order to stabilize inflation;

- a decline in the importance of income taxes, mainly accounted for by the fall in the share of corporate income taxes (since the vast majority of taxes, namely enterprise profit tax, turnover tax and payroll tax, were all collected from enterprises);
- a decline in the importance of social security contributions-cum-payroll taxes in the transition countries; a rise in the share of individual income taxes;
- a sharp increase in the importance of domestic indirect taxes in tax revenue-both VAT/sales/turnover taxes and excises- reflecting in part the decline in the role of direct taxes.

In practice, all transition countries started reforming their tax system by firstly reforming indirect taxes, namely, by introduction of the European style Value added tax (hereafter: VAT). Moreover, a fall in customs and other turnover taxes meant that the main source of tax revenues from indirect taxes would rely on VAT. General standard suggestions of the IMF regarding tax reforms – single, simple VAT rates varying between 15−20 percent, simple, single rate personal income tax (hereafter: PIT), corporate income tax (hereafter: CIT) with special care for small businesses (Keen et al., 2006, pp. 5−6). Similarly, profit taxes, payroll taxes and personal income taxes also needed a reform. What most transition countries had to do in the area of personal income taxation was to reduce the number of tax rates and again, adopt clear laws which regulate the area of personal income taxation. Personal income taxation played relatively small role in the tax system of most transition countries (see Tanzi, 1991, p. 3). Regarding personal income taxation, according to Tanzi, transition countries could have chosen from Anglo-Saxon global income tax approach or older Latin/Mediterranean schedular approach. IMF gave a general advice to all transition countries (Stepanyan, 2003, p. 5): "An administratively simple form of personal income tax with limited deductions, a moderate top marginal rat, an exemption large enough to exclude persons with modest incomes, and a substantial reliance on withholding". However, as seen later, transition countries have applied a variety of personal income tax approaches with flat tax being the most applicable one. PIT was firstly reformed in Hungary and Poland with the introduction of mildly progressive tax rates (e.g. Hungary in 1988, Poland in 1991 and the Czech Republic in 1993). The most progressive tax rate went up to 50 percent, but in most countries the top statutory tax rate did not exceed 40 percent. Global personal income tax was not introduced fully such as in developed countries but rather a "hybrid" base; a combination of consumption and income based income tax.

3 THEORETICAL ASPECTS OF THE FLAT TAX

In most literature flat tax is classified as a variant of the expenditure tax since savings remain untaxed. The first idea of the flat tax model was introduced to the wider public in 1981 in the USA. At that time in the USA, Goode et al. (1984) wrote that the current income tax has become unfair and complicated[3]. Hence, movement towards a simpler model of income taxation was a logical proposal. The idea of the flat tax consists of two different taxes (Parthasarathi, 1995, p. 53):
   a) An individual income tax on labour earnings that can be made progressive
   b) A business cash-flow tax similar to an accounts-based VAT with wages being deducted.

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[3] As proof of the complexity of American tax system is the fact that the 1950's, only 10−15% of Americans asked for professional help of tax advisors whereas in the 1980's more than 50% of Americans needed tax advisors' help (Jelcic, 1998, p. 41−60).

Contemporary idea of the flat tax was firstly introduced by Hall and Rabushka. However, English Channel islands have been applying flat tax since 1940's. According to Hall and Rabushka (2007, p. 41), this type of flat tax (also called a uniform, proportional, or single-rate tax) satisfies the principle of horizontal equity. Furthermore, the justification for such claim they have found in the works of philosopher John Rawls, (1971, p. 278) who states that "a proportional expenditure tax may be ... the best tax scheme." As incomes double, triple, or grow tenfold, tax obligations double, triple, or rise tenfold. For the lowest income earners, Hall and Rabushka propose personal allowance. In regards to vertical equity, Hall and Rabushka discuss the current inefficiency of comprehensive income tax in regards to vertical equity (e.g. the presence of loopholes or unequal treatment of income earned through government/municipal bonds). The progressivity of the flat tax model is achieved through the system of personal allowance, i.e. when the average tax rate rises with income. The flat tax system should be revenue-neutral which means that the flat tax should earn the same amount of revenues as the comprehensive income tax system (Hall and Rabushka, 2007, p. 52). They propose a flat-rate of 19 percent which will raise the same amount of revenues as multiple tax rates applied. Moreover, revenue-neutrality will be achieved through compensation of an increased revenues from business taxation and falling revenues from individual taxation.

3.1 Flat tax 'silver' anniversary

Twenty years after the first idea of the flat tax model, the so called transition countries started adopting this way of taxation heavily. Chart 1 shows increasing number of flat tax regimes in the last twenty five years.
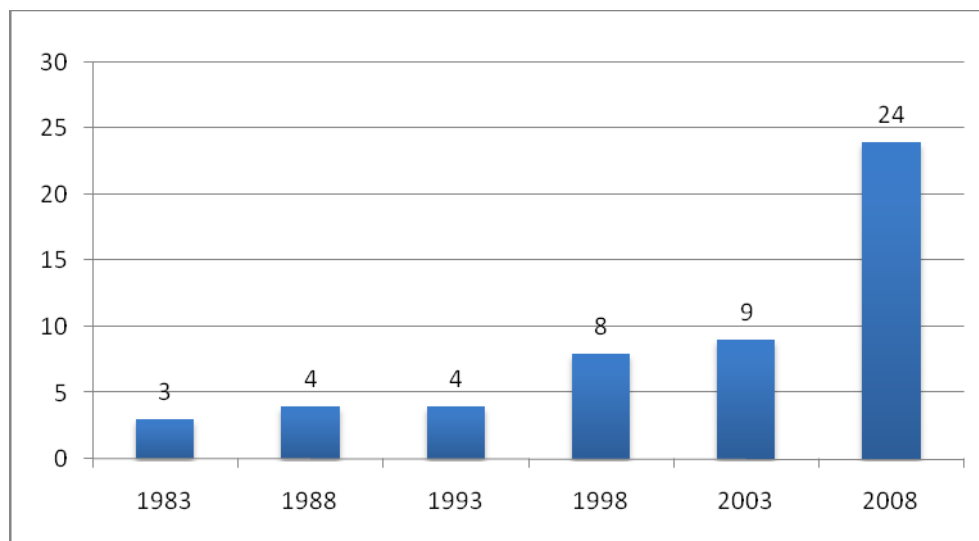
Chart 1: Growing number of flat tax regimes, (Mitchell, 2008, p. 1)

In the period of ten years (1998−2008) the number of flat tax regimes has tripled. Most of countries that have adopted it were transition countries and ex USSR countries. The logical question that arises is why have transition countries applied the flat tax? Several answers are possible: to attract foreign direct investments and to increase employment, to stimulate domestic investment through increased savings, to promote economic growth, to show openness of their economies, etc. Another significant reason is that transition period is, by itself, a complex process which therefore requires a simplified taxation system which will then boost and stimulate the transition period. So what have transition countries in terms of tax rates applied? There is an array of tax rates among transition countries: from quite high

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PIT rates in the Baltic States to very low rates in the Western Balkan states which is sometimes referred to as a 'race to the bottom'.

One has to be careful when drawing conclusions regarding the application of the flat tax in transition countries. Sometimes, it might be even incorrect to use the term flat tax for some countries since they do not apply any of the theoretical assumptions of the model or they have moved away from it. Some authors (e.g. Blazic) have been asking the following question: What is, apart from uniform tax rate, left from the flat tax? OECD (2006, p. 85) on the other hand has defined four main types the flat tax can be interpreted:

- Single rate, no basic tax allowance. All (positive) income is taxed at a flat rate;
- Single rate, with a basic tax allowance. All (positive) income above a basic allowance is taxed at a flat rate;
- All (positive) payments to employees above a basic allowance are taxed at a flat rate. In addition, the same flat tax rate is levied on all business income (incorporated and unincorporated business income). The base of the business tax is value added, which is calculated on a cash-flow basis, less the payments to employees. This is equivalent to a consumption tax with a basic allowance, and is often referred to as the Hall-Rabushka's flat tax proposal. Consequently, the income from savings and investments is not taxed under this flat tax proposal;
- Single rate, with a non-wastable tax credit (basic income). This non-wastable tax credit is of equal value to all individuals, regardless of their income levels (thus, it is in practice a negative income tax at low-income levels). This is often called the "basic income flat tax", where the basic income is supposed to replace all social security benefits. In addition, a flat tax rate is levied on personal income. This is equivalent to the Atkinson (1995) flat tax proposal.

The flat tax can be based on income or consumption. Also, flat tax can include only personal income or personal income and business income. Depending on the personal allowance, personal income tax can either be progressive or proportional. All transition countries apply the first two cases of the flat tax.

In selected transition countries, flat tax rates vary and have generally been decreasing over the years (e.g. Estonia, Lithuania). Some countries have been changing tax rates over the past few years as a result of financial turmoil (e.g. Latvia, Montenegro) whereas others (e.g. Estonia, FYR Macedonia) have introduced the possibility of decreasing personal income tax rates in the year of reform. Moreover, several countries/entities (e.g. Montenegro, Republic of Srpska) have been applying to progressive taxation in several years, but have moved back to flat tax. This is significant since in those years tax revenues have not been increasing due to progressive taxation (National Statistics at World Economic Outlook database). Table 1 shows flat tax rates in selected transition countries over the years.

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Table 1: Personal income tax rates in selected transition countries (Gray et al. 2006, p. 257; IBFD European tax handbook 2008; Taxation trends in the EU, 2012; Arandarenko et al., 2008; National Personal income tax laws)

Country	Year of personal income tax reform	Personal income tax rate in the year of introduction (in %)	Personal income tax rate in 2012 (in %)
Estonia	1994	23	21
Lithuania	1994	33	15
Latvia	1995	25	25
Slovak Republic	2004	19	19
Montenegro	2001	19	9
FYR Macedonia	2007	12	10
Federation of B&H	2009	10	10
Republic of Srpska	2006	10	10

Table 1 shows that personal income tax rates in selected transition countries are quite different, from as high as 25 percent (Latvia) to as low as 9 percent (Montenegro). Moreover, in some countries/entities (e.g. Montenegro, Republic of Srpska), progressiveness of the personal income tax system enabled through the mechanism of personal allowances has been abolished in recent years. Hence, most countries apply the second type of the flat tax.

4 APPLICATION OF THE FLAT TAX IN TRANSITION COUNTRIES

As already mentioned above, flat tax has been applied in variety of forms. Since the idea of this paper is to justify the application of the flat tax in transition countries, tax wedge as a generally accepted measure of the labour tax burden is given in table 2 for three Baltic States with Slovak Republic and three analysed Western Balkan states. Tax wedge is a measure of the labour tax burden and it calculated as a sum of personal income tax, employee plus employer social security contributions together with any payroll tax less cash transfers, expressed as a percentage of labour costs (OECD, 2010, p. 483). In addition, tax wedge is calculated using methodology introduced in OECD publication "Taxing wages".

Table 2: Tax wedge in selected transition countries for a single worker at two-thirds of average earnings in % (Taxation trends in the EU, 2012, p. 34; Arandarenko et al., 2008, p. 50; Author's calculation based on National Statistics of Western Balkan states)

Country	2006	2007	2008	2009	2010
Estonia	37,3	37,6	37	37,7	38,6
Latvia	41,8	41,1	39,9	41,5	41,5
Lithuania	40,6	41,2	40,3	38,9	38,9
Slovak Rep.	35,2	35,5	36	34,4	34,5
Montenegro	39,3	39,3	34,8	34,9	37
FYR Macedonia	39,2	37,6	36,8	31,6	30,9
RS	34,2	31,6	31,6	33	33,5
FB&H	29,3	29,3	29,3	28,6	28,6
Average	37,1	36,7	35,7	35,1	35,4

N.B. Data for Montenegro for years 2006 and 2007 show tax wedge with included fringe benefits (fb): hot meal allowance and transport allowance; Bosnia and Herzegovina consists of two entities[4]: Federation of Bosnia and Herzegovina (FB&H) and Republic of Srpska (RS). Since legislation in two entities is different in regards to social security contributions and personal income tax, tax wedge is calculated separately. Moreover, in FB&H fringe benefits are not taxable whereas in RS they are included in the tax base.

As shown in table 2, tax wedge in selected transition countries has a downward trend especially if one looks at data from the three Baltic states and Slovak Republic from 2000-2010 (Taxation trends in the EU, 2012 edition, p. 34). The three selected Western Balkan states have the tax wedge on average in line with the three Baltic States and Slovak Republic. Only FB&H has tax wedge lower than all other countries. However, since fringe benefits are not taxable and they increase the net wage, tax wedge is quite low. Nonetheless, if fringe benefits are excluded, tax wedge in FB&H amounted to 40.3 percent from 2009 onwards for a single worker at two-thirds of average earnings. Moreover, since the introduction of the flat tax in selected transition countries, tax rates have been decreasing (e.g. Estonia, Montenegro) as well as social security contributions rates (e.g. Montenegro, FYR Macedonia, FB&H).

Tax wedge shows several important facts:
- total labour tax burden in transition countries is quite high;
- social security contributions take most of the tax wedge (especially in countries where there are social security contributions paid by employee and employer)
- social security contributions remain high in transition countries and with progressive taxation similar to those in developed countries, tax wedge would be very high (e.g. Hungary)
- gross income in transition countries especially Western Balkan states is quite low compared to developed countries. Hence, the tax base for calculating the tax wedge is quite low.

Low gross income in transition countries could imply the following: there is a high tax evasion so the tax base has been lowered through the system of so called 'envelope salaries'. Significance of shadow economy and high unemployment rates especially in the Western Balkan countries also contribute to high tax evasion of those who are employed. Hence, World Bank staff suggests that in order to improve compliance and tax discipline, personal income taxation should be based on flat tax due to the fact that simplicity and compliance are the 'selling points' of the flat tax. Moreover, most selected transition countries that have been using progressive income taxation replaced it for the flat tax in order to improve simplicity and compliance of the tax system. A measure used by the World Bank staff that partially shows an improvement in compliance (in the absence of policy changes, i.e. changes in tax base or rate, or both) is PIT elasticity to wages. PIT elasticity to wages is calculated as (Gray et al., 2006, p. 286):

$$\varepsilon_i = \frac{(\%\Delta PIT collection)}{(\%\Delta Taxbase(wages))} \tag{1}$$

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[4] Brcko district will not be included due to scope of this paper.

PIT elasticity to wages will be calculated for two cases: Slovak Republic and Federation of B&H since these two examples have not been changing either tax base and tax rates in the past years. Charts 2 and 3 shows PIT elasticity to wages for the two cases.

	2003	2004	2005	2006
Elasticity	1,5207	-0,7751	0,8148	0,9617
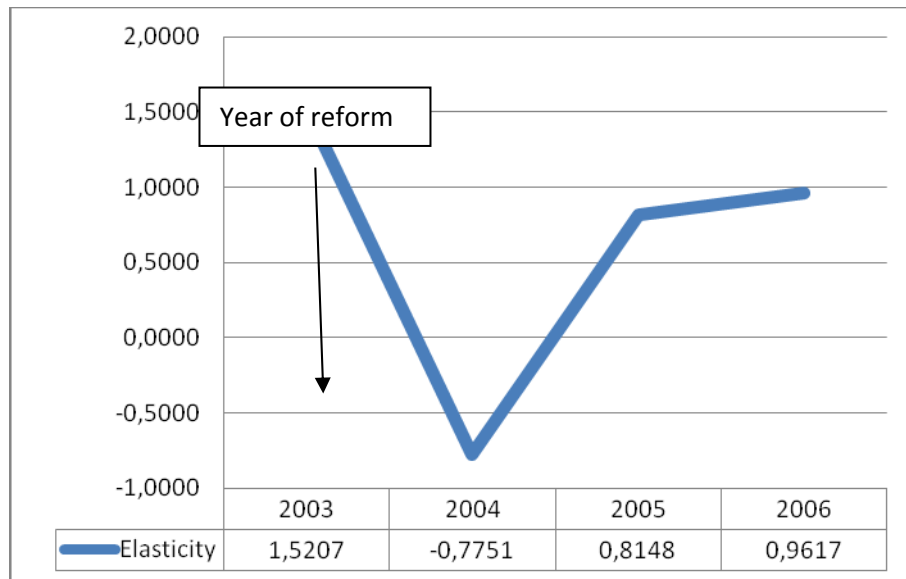
Chart 2: PIT revenue elasticity to wages in Slovak Republic (ILO database, Taxation trends in the EU, 2012; World Economic Outlook database; Author's calculation)

	2006	2007	2008	2009	2010	2011
Elasticity	0,2414	1,7768	1,9686	-2,0576	1,9198	4,8581
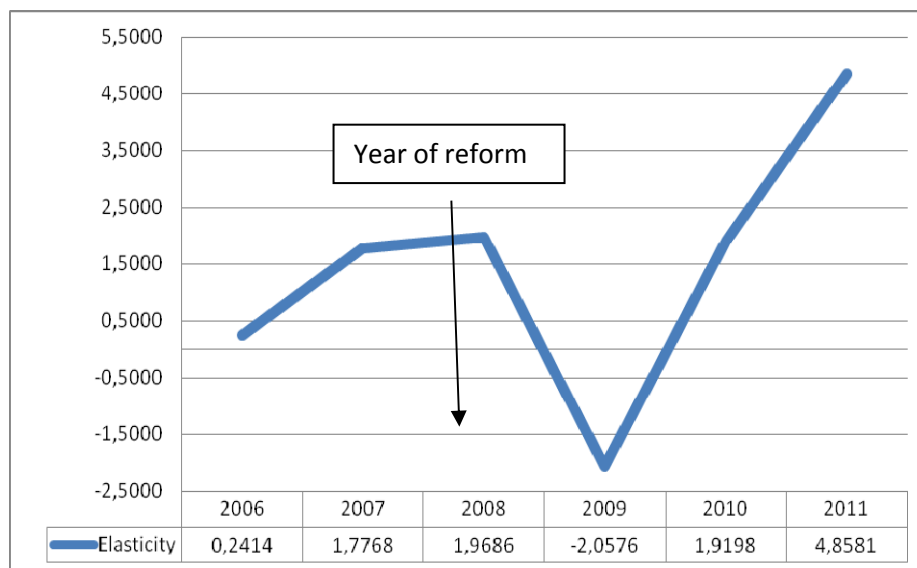
Chart 3: PIT revenue elasticity to wages in FB&H (ILO database, B&H Directorate for Economic Planning; Author's calculation)

As expected, in the year of reform there is a fall in PIT elasticity to wages in both cases. However, in the year after the PIT reform, there is an increase in PIT elasticity to wages which shows, even rudimentary, an improvement in compliance. This is significant since in the case of Slovak Republic flat tax replaced progressive taxation and therefore justified its 'selling point' which is increased compliance/simplicity. In the case of FB&H, similar conclusion could be drawn.

5 CONSLUSION

The aim of this paper was to analyse personal income tax reform in selected transition countries which based their reform on so called 'flat tax' model. Brief analysis of the transition highlighted the issues all transition countries face regarding general transformation process towards market-oriented economy. In times of transformation, reforming a tax system becomes even more challenging task. A brief analysis of the personal tax system based upon a 'flat' tax shows that transition countries have been successful in reforming their personal tax system. Moreover, personal income tax rates have been decreasing in the past few years, tax base has been changing and some countries have moved towards progressive taxation but shortly afterwards reintroduced flat tax. Empirically, in all selected transition countries, mainly due to high social security contributions, tax wedge as a measure of labour burden is quite high. In addition, it has been decreasing over the years as the tax rates and/or social security contributions have been decreasing. Another useful measure regarding compliance of the personal income tax system is used. PIT elasticity to wages reveals that in the year of reform, a fall in PIT elasticity to wages. However, if in the year(s) after the reform elasticity is greater than one, an improvement in compliance could be expected. This could be seen in the case of FB&H.

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PROBLEMS OF MEDICAL AND RECREATIONAL TOURISM DEVELOPMENT: LOGICAL FRAMEWORK APPROACH

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ABSTRACT
At present, Russian-Chinese cooperation in the sphere of tourism is being actively developed. One of the most important directions of this cooperation is medical and recreational tourism. Specific factors of tourism development in the Novosibirsk Region (Russia) and in the Guangxi Zhuang Autonomous Region (People's Republic of China) are investigated by the authors. In order to facilitate this cooperation, it is important to reveal problems, hindering the development of inbound medical and recreational tourism, and to look for ways of solving these problems. The authors offer to apply the methodology of problem analysis of the inbound medical and recreational tourism development. This methodology is based on the Logical Framework Approach, that allows to elaborate concrete projects directed at solving the problems revealed. The proposed methodology includes the following steps:
  1. *To establish a Problem Tree based on the cause-effect logic.*
  2. *To convert the Problem Tree into an Objective Tree (showing means-ends hierarchy).*
  3. *To analise and select a strategy(-ies) of achieving the objectives.*
  4. *To prepare a Logical Framework Matrix of the project.*
  5. *To elaborate Activity, Resource and Cost Schedules of the project to be implemented.*
  6. *Project monitoring.*
The proposed methodology has been tested in the Novosibirsk Region of Russia and in the Guangxi Zhuang Autonomous Region of the People's Republic of China.

Keywords: *Logical framework approach, Medical and recreational tourism, People's Republic of China, Problem analysis, Russian Federation*

1 INTRODUCTION

At present, tourism is one of the most profitable branches of industry, and, consequently, a very attractive one. Its share accounts for (Kryukova, 2010, p. 8):
- about 10% of the world gross income;
- 8% of the world export;
- 30-35% of the world services provided.

The current world tourism sector development is characterised by progressing increase. Activation of economic processes in the sphere of tourism makes for this increase, when countries and regions give priority to development of inbound and domestic tourism, trying to

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increase import of foreign capital and currency savings of foreing citizens, with the aim to improve their balance of payments.

Direct inter-regional relations of the Russian regions and provinces of the People's Republic of China play an important role in the tourism development. The authors of the paper give characteristic of the tourist potential of the Novosibirsk Region of the Russian Federation (NR-RF) and of the Guangxi Zhuang Autonomous Region of the People's Republic of China (GZAR-PRC). In the paper there are proposals concerning analysis of problems, hindering increase of the competitiveness of inbound medical and recreational tourism in the NR-RF and GZAR-PRC, as well as recommendations concerning solving these problems with the help of the Logical Framework Approach.

2 INBOUND AND OUTBOUND TOURISM IN RUSSIA AND CHINA: FIGURES AND FACTS

Economic attractiveness of tourism is a challenging factor for intensive development of the tourist sector in Russia and China. The data below convincingly prove the fact that both countries make efforts to increase activities in this direction, and the achieved positive results reflect it. Tables 1 and 2 below characterise the state of outbound and inbound tourism in Russia.

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Table1: Outbound Tourism in Russia (Analytical Service ATOR,2011)

Country	Data of the Russian Federal State Statistics Service		Data of Tourist Operators Average change in 2011 (%)
	January-September 2011	Percentage of change (%)	
Turkey	2 471 039	+14.1%	+27%
China	1 098 939	+8.9%	+5%
Egypt	905 623	-39.5%	-40%
Finland	681 449	+32.4%	+15%
Greece	568 226	+58.0%	+50%
Spain	563 811	+58.8%	+50%
Germany	527 876	+51.2%	+30%
Thailand	514 844	+95.0%	+40%
Italy	465 268	+28.6%	+15%
Bulgaria	323 366	+28.4%	+20%
Cyprus	272 492	+40.5%	+20%
Czeck Republic	267 722	+35.2%	+25%
The United Arab Emirates	244 051	+32,4%	+25%
Ukraine	225 700	+32,8%	+30%
France	201 706	+16.3%	+15%
Israel	162 334	+31.4%	+25%
Montenegro	154 300	+16.1%	+10%
Austria	144 122	+41.8%	+20%
Tunisia	128 038	-17.9%	-25%
Great Britain	118 603	+30.1%	+15%
Switzerland	112 130	+18.6%	+15%
Croatia	103 970	+7.6%	+30%
All countries	11 366 224	+16.2%	+20%

Table2: Inbound Tourism in Russia (Analytical Service ATOR,2011)

From the country:	Number of Tourist Arrivals		Percentage of Change (%)
	January-September, 2010	January-September,2011	
Germany	306 261	306 872	0.2
China	127 944	195 907	53.1
The United States	145 290	150 683	3.7
Great Britain	145 290	110 152	-24.2
Finland	109 789	109 737	0.0
Italy	105 913	107 103	1.1
Spain	79 697	92 277	15.8
France	79 714	80 902	1.5
Israel	47 485	59 358	25.0
Turkey	40 862	58 463	43.1
South Korea	36 006	41 440	15.1
Japan	35 585	32 050	-9.9
The Netherlands	29 243	31 601	8.1
Canada	28 238	30 683	8.7
Latvia	28 345	26 207	-7.5
Estonia	27 950	25 991	-7.0
Poland	21 343	25 598	19.9
Austria	25 179	24 535	-2.6
Sweden	18 204	23 030	26.5
Switzerland	20 739	22 784	9.9
Australia	18 747	22 186	18.3
Norway	19 169	19 748	3.0
Total	**1 807 086**	**1 975 783**	**9.3**

As the Table 1 shows, China takes the second place in terms of arrivals of Russian tourists. At the same time, judging by the data of 2010 and 2011 (see Table 2), the same is true in terms of Chinese tourists visited Russia. Moreover, popularity of Russia is rapidly growing among the Chinese: the number of Chinese tourists in 2011 has increased by 53.1% as compared with the preceding year. It can be proved also by the data of the year 2011 published in the Tourism Reference Book TOURest (Tourism Statistics in Russia, 2011).

The situation on the China outbound tourism market is illustrated by the Charts 1 and 2, showing a steady growth of number of arrivals during the period of 17 years, since 1993 till 2009.

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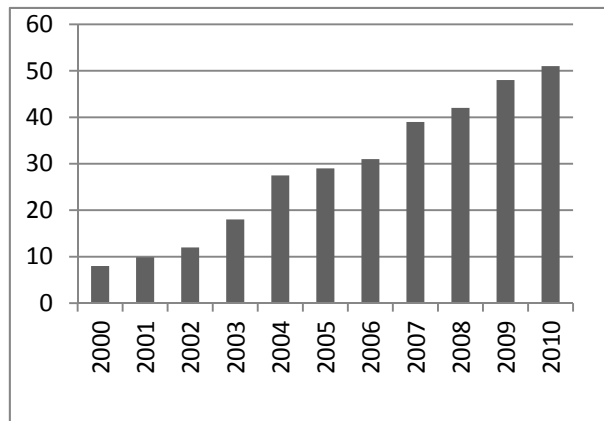
Chart 1: Dynamics of the Outbound Tourism Market in China (China Tourism Statistics)
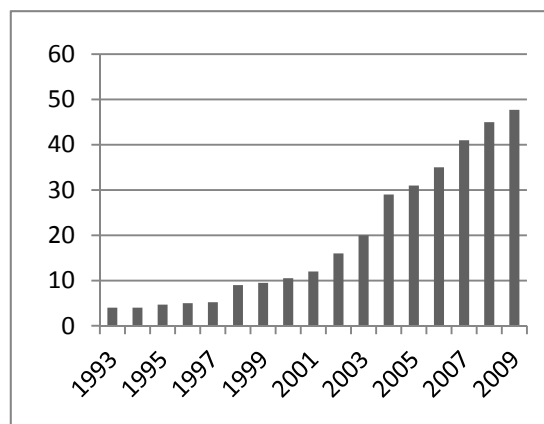
Chart 2: China Tourism Flock Abroad (China Tourism Statistics)

Volume of the China inbound tourism is characterised by the fact, that despite the fact that by the end-September 2011 China received foreign tourists by 1% less, than in 2010, the total number of them made up an impressive number of 100 million persons, bringing in 35 billion US dollars of income (that is 2% more as compared with the same period of the preceding year).

Table 3 summarises data of foreign tourists hosted by various provinces and cities of China in 2011 as compared with the year 2010. Russia takes the third place on the China inbound tourism market. According to the forecast of the World Tourism Organisation, it is foreseen, that number of foreign tourists visiting China would increase by 43 million persons per year in the near 20 years, coming up to 1.8 billion foreign tourists in 2030 (China Inbound Tourism in 2007).

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Table 3: Reception of Oversea Tourists and Tourism Revenue by Cities and Provinces of China (China Tourism Statistics, 2011)

№№	Provinces and Cities	Tourism Revenue (Unit in 100 Million US dollars)	Growth(%)	Reception of Tourists (Unit in 10,000 persons)	Growth (%)
01	Guangdong	100.28	9.30	2747.80	7.0
02	Shanghai	47.44	-4.58	533.39	1.3
03	Beijing	43.57	-2.30	412.51	8.8
04	Jiangsu	40.16	3.50	556.83	2.3
05	Zhejiang	32.42	6.60	570.64	5.7
06	Fujian	25.99	8.59	312.03	6.4
07	Liaoning	18.56	21.62	293.20	21.2
08	Shandong	17.65	26.90	310.04	22.2
09	Tianjin	11.83	18.10	141.02	15.6
10	Yunnan	11.72	16.34	284.49	13.7
11	Shaanxi	7.71	16.81	145.08	15.4
12	Hunan	6.73	8.95	130.87	17.9
13	**Guangxi**	**6.43**	**6.93**	**209.85**	**4.4**
14	Heilongjiang	6.39	-26.58	142.51	-29.0
15	Anhui	5.66	24.51	156.16	18.2
16	Inner Mongolia	5.58	-3.27	128.96	-16.8
17	Chongqing	5.37	19.44	104.81	20.2
18	Hubei	5.10	15.29	133.46	12.4
19	Henan	4.33	15.65	125.85	20.6
20	Shanxi	3.78	25.71	106.78	13.7
21	Hebei	3.08	12.36	84.22	12.3
22	Jiangxi	2.90	15.12	96.43	20.2
23	Sichuan	2.89	25.42	84.99	21.5
24	Hainan	2.77	-11.86	55.15	-21.9
25	Jilin	2.43	14.90	68.05	10.2
26	Xinjiang	1.37	0.63	35.49	-2.3
27	Guizhou	1.10	-5.58	39.95	1.0
28	Tibet	0.79	152.99	17.49	157.2
29	Qinghai	0.15	52.00	3.61	20.9
30	Gansu	0.13	-21.80	6.07	-27.0
31	Ningxia	0.04	47.16	1.45	25.3

3   TOURISM IN THE NOVOSIBIRSK REGION AND GUANGXI PROVINCE

3.1   Tourism in Guangxi Province

Guangxi Province, where the Guangxi Zhuang Autonomous Region is located, is an active operatoron the tourism market. Guangxi Provincetakes up the 13th position among the most important provinces and Cities of China. Its annual revenue from tourist services is about 643 Million of US dollars.

Department of Tourism of the Guangxi Zhuang Autonomous Region states the 21% growth of foreign tourists' arrival in 2011, compared to that in the previous year. The total number of man-tripsis more than 3 billion, with the revenue of 1 billion 51.875 million US dollars (increasing 30.32% from that in 2010). The following countries account for the majority market shares on the tourism markets of the Guangxi Province: Vietnam, Malaysia, South Korea, the USA, France, Singapore, Indonesia, Japan, Great Britain and Germany (The Rapid Development of Tourism Cooperation of Guangxi with ASEAN, 2012).

The Guangxi Provinces is active in making contacts with other countries, in order to increase inflows of tourist. Thus, in particular, it is planned to open a health resort in the Guangxi Zhuang Autonomous Region, with the aim to attract Russian tourists. Bilateral Russian-Chinese negotiations of this issue resulted in intention to create a Baekhaij Tourist Company, oriented to develop inbound tourism in Baekhaij and to improve tourist infrastructure of the City, in order to attract more tourists from Russia and other neighbouring countries (Guangxi Zhuang Autonomous Region of China Intends to Create a Resort Base Oriented to Russian Tourists, 2008). In practice it means mutual intention to develop such poorly developed sector of the Russian-Chinese cooperation, as medical and recreational tourism.

One of the crucial issues of the tourism development is training specialists for this sector of economy. Chinese educational institutions pay special attention to that issue. By the end of 2009, in China there were 1733 colleges of tourism, with the total number of students reaching 952,400.Taking into account rapid development of the Russian-Chinese cooperation in the tourism sector, Guangxi Province takes a special interest in widening cooperation with Russian higher educational institutions, including participation in international educational programmes provided by Russian higher educational institutions.

3.2   Tourism in the Novosibirsk Region

At present the Novosibirsk Region makes efforts to develop practically all types of tourism, including business tourism, medical, health and recreational tourism, sports tourism, educational tourism, scientific tourism, agritourism, hunting and fishing. There are 124 hotels, 31 recreation centres, more than 400 sanatoriums and health resorts, 11 modern mountain ski resorts, 26 hunting camps, and others (altogether more than 300 tourist-recreational units).

According to the National Rating Agency "Expere RA", the following negative trends are observed in the Novosibirsk Region: recession in investment attractiveness and in tourism potential (Concept of a Long-term Programme "Tourism Development in the Novosibirsk Region in 2012−2016 years", 2011). It should be stressed that only a quarter out of 240 Novosibirsk tourist companies deal with inbound tourism, meanwhile about 60% of companies deal with domestic tourism, at the same time, all companies are involved in outbound tourism (Tourism Development in the Novosibirsk Region, 2012, p. 55).

In 2011, in order to improve the situation, the Novosibirsk Regional Government elaborated a long-term Programme "Tourism Development in the Novosibirsk Region in 2012−2016" (Concept of a Long-term Programme "Tourism Development in the Novosibirsk Region in 2012−2016 years", 2011). The Programme notes, that tourism development in the Novosibirsk Region is constrained by the following factors:weak engineering infrastructure development, insufficient support to tourism business by local self-government institutions and others, as well as poor promoting of the tourism potential of the Novosibirsk Region (e.g. by means of Internet data bases and resources). The Programme is directed to use a target-

oriented approach. Thus, it is planned to provide conditions for development of a network of tourist-recreational units, to stimulate investment activity, and to create an Information System to promote tourism and recreational potential of the Novosibirsk region.

4   LOGICAL FRAMEWORK APPROACH TOWARDS SOLVING PROBLEMS OF TOURIST AND RECREATIONAL SERVICES

Activisation of tourist activities in the Novosibirsk Region and in the Guangxi Zhuang Autonomous Region implies elaboration and consistent implementation of a complex of projects, directed to strengthening competitiveness of medical and recreational services, financed by different sources.

While elaborating such projects, it is important to demonstrate visually: logic and strategy of activities; direction of the activities towards achievement of the concrete objectives; a system of key indicators to measure the extent of achievements of objectives; taking into consideration assumptions and risks that may impact on the project implementation, etc. All these aspects could be clear, when the Logical Framework Approach is used (Project Cycle Management, 2010). This method has two main stages:

1) **Analysis Stage.** This stage includes the following phases:
   - Stakeholder Analysis(identification and assessment of the main "players"),
   - Problem Analysis (identification of key problems and their cause and effect relations - current negative situation),
   - Objective Analysis (transformation of problems into objectives and indentification of means and end relations – desirable/improved situation),
   - Strategy Analysis (how to address the current negative situation in order to achieve the planned results, and to select the most appropriate strategy for the project implementation).

2) **Planning Stage.**This stage includes the following phases:
   - Developing a Logical Framework Matrix (LFM) of a project. This tool helps to define a project logical structure, to check its inner logic, to define project objectives, taking into account measurable indicators of the project success, to reveal assumptions and risks (factors outside the project management's control).
   - Scheduling Project Activities. Using the project LFM, we can determine the sequence of activities and their dependency; estimate duration of the activities; divide activities into manageable tasks and assign responsibilities among the project players.
   - Developing Resource Plan. The resource plan can be drawn up on the basis of the Activity Plan. It defines necessary input resources (human, physical, etc.), schedule of their usage, and a project budget on the whole.

At the first stage, the problem analysis is the most crucial aspect of the project planning (Project Cycle Management, Trainers' Guidelines, 2010). A clear problem analysis provides as foundation on which to develop a set of relevant and focused project objectives. The result of the problem analysis is the so called Problem Tree, reflecting hierarchy of the causes and consequences of the problems identified. Then the Problem Tree is converted into an Objective Tree, reflecting means and ends hierarchy and showing the decide situation. Strategy Analysis helps to decide what should be included in the project,and what should not (Training Module on Project Cycle Management, 2010).

The results of the analyses carried out at the Analysis Stage are used to prepare a Logical Framework Matrix of the project. The Matrix is the most important product of the Planning Stage and it reflects the project summary (see Table 4). Then the LF Matrix will be used for preparinga detailed Plan of Project Activities and the project budget.

Table 4: Logical Framework Matrix of a Project (Project Cycle Management Guidelines, 2004, p. 73)

Project Description	Indicators	Sources of Verification	Assumptions
Overall Objective: The broad development impact to which the project contributes – at a national or sectoral level (provides the link to the policy and/or sector programme context)	Measures the extent to which a contribution to the overall objective has been made. Used during evaluation. However, it is often not appropriate for the project itself to try and collect this information.	Sources of information and methods to be used to collect and report it (including who and when/how frequently).	
Purpose: The development outcome at the end of the project – more specifically the expected benefits to the target group(s)	Helps answer the question 'How will we know if the purpose has been achieved'? Should include appropriate details of quantity, quality and time.	Sources of information and methods to be used to collect and report it (including who and when/how frequently)	Assumptions (factors outside project management's control) that may impact on the purpose-objective linkage
Results: The direct/tangible results (good and services) that the project delivers, and which are largely under project management's control	Helps answer the question 'How will we know if the results have been delivered'? Should include appropriate details of quantity, quality and time.	Sources of information and methods to be used to collect and report it (including who and when/how frequently)	Assumptions (factors outside project management's control) that may impact on the result-purpose linkage
Activities: The tasks (work programme) that need to be carried out to deliver the planned results (optional within the matrix itself)	**Means:** The resources required to carry out the activities (human, physical, etc.)	**Costs**: Real costs	Assumptions (factors outside project management's control) that may impact on the activity-result linkage

Analysis of problems, that the medical and recreational tourism sector in the Novosibirsk Oblast (NO) and in the Guangxi Zhuang Autonomous Region (GZAR) face, was carried out

with the help of the Logical Framework Approach. The subsequent steps helped to define the following objectives:

- conservation and protective development of the unique peculiarities of both Regions in a long-range perspective;
- development of the medical and recreational infrastructure and systems of information and transport communications in the NO and GZAR;
- stimulation of investments into the tourism sector of industry in the NO and GZAR;
- coordinated training of highly qualified specialists for the tourism sector, enhancement and development of the system of life-long and supplementary education;
- development of innovation approaches to management of medical and recreational tourism, introduction and improvement of a system of assessment and monitoring of tourist services in the both Regions;
- intensification of integration processes in development of medical and recreational tourism in the NO and GZAR, with the aim of widening tourist services export, rebranding and mutual promoting of tourism potential of each other.

If these objectives are achieved, the situation in the tourism sector would be sufficiently improved. At the same time, the scale of these objectives leads up to the following conclusion: in order to achieve each of the above mentioned objectives, it is important to solve a complex of complicated tasks, integrated into one or several projects.

5 CONSLUSION

Support to the tourism sector on the national and regional levels, availability of stimulating programmes may facilitate active development of medical and recreational tourism. However, rise in competitive ability and attractiveness of the regions as providers of quality medical and recreational services requires thorough elaboration of a package of comprehensive and complementary projects. Logical Framework Approach should be used as a methodological base for elaboration of such projects. Logical Framework Approachis a very effective analytical and managerial tool. It supposes systematic consideration and analysis of concrete problems, SMART objectives, based on the carried out analyses, well-grounded strategies, and so on. This results in a concrete, logically verified operational work plan, taking into account possible risks, resources constraints and measures ensuring control of the results obtained; operational budget, which is explicitly linked to the planned activities and results; as well as efficient project management.

Considering the range of problems, arising from the development of medical and recreational tourism in the Novosibirsk Region and in the Guangxi Zhuang Autonomous Region, a two-stage system of analysis can be recommended. At first, problem analysis and formulation of objectives are carried out on the macro-level, meaning identifying of target spheres (e.g. infrastructure development, educational system development, training of specialists, etc.). Then all stages of the Logical Framework Approach are carried out in application to the defined target spheres. As a result a package of system-interrelated complementary projects can be generated. Implementation of these projects would be directed exactly on solving overall problems.

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THE COMPARATIVE ANALYSIS OF HIGHER EDUCATION GOVERNANCE INDICATORS AND ITS EFFECTIVENESS IN EUROPEAN COUNTRIES

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ABSTRACT
During the last twenty years higher education systems of European countries have gone trough different challenges: expansion, privatization and internationalization, which have affected and changed the higher education governance systems. These challenges highlighted the question of quality assurance and encouraged development of higher education management. The increasing interest of society in higher education quality forces the universities to demonstrate their effectiveness and usefulness. Various ranks of world universities and ratings of scientific publications are useful for higher education accountability to society. The purpose for this paper is to compare European countries' higher education governance indicators and to analyze their effectiveness. Author uses such national statistic data as number of students and universities and public expenditure on higher education. To investigate effectiveness author uses world's university rank and SJR indicator, what characterizes prestige of scientific publications. Methods used in the research are mathematical statistics, correlation and regression analysis to detect common and distinctive features between governance indicators in European countries. Results of the research allow identifying most successful higher education governance models in Europe.

Keywords: *Accountability, Comparative analysis, Correlation analysis, Effectiveness of governance, Governance of higher education, Regression analysis*

1 INTRODUCTION

There have occurred a lot of changes in the higher education sector during the last decades, which has affected the study quality and higher education management. Austrian researcher A.Bernhard distinguishes four stages for the higher education process of changes within more than 60 years: higher education expansion, diversification, privatisation and internationalisation (Bernhard, 2011, p. 300). This has affected both higher education governance and study quality. In the course of time higher education management has changed from classical form, when everything was set by government, to the form, where different interested sides and their politics try to manage the higher education system (Leisyte, 2007, p. 427).

European Union (ES-27) has about four thousand higher education institutions and more than 19 million students (Europe at figures, 2011, p. 699). In this article the author makes comparative analyse for the there main indicators characterising the governance of higher education systems in 24 European countries: number of students, number of higher education institutions and amount of public funding. The author compares these criteria within the selected European countries, in addition of that looking at each country's main goals of higher education funding and also strategies of *Europe 2020* goals in education (Supporting growth and jobs, 2011, p. 32). In the first part of this article the author's conclusions are based on the comparative analysis and interpretation of quantitative and qualitative indicators, not

researching deeply into the development of higher education system of a separate country, or its demographical status, or history.

Nowadays higher education quality has become the main discussion object of interested sides. More and more often the society wants to be ensured that the higher education offered to it by the institutions is qualitative and the investments are worthwhile. It means that accountability to interests sides comes to one of most important tasks for higher education. In its turn, this promotes the popularity of different ranks of world universities and scientific publications prestige in the eyes of society and other interested sides. Therefore, in addition to statistical data, the author sees the necessity to analyse the achievements of European countries in the world's university and scientific prestige ranks to prove effectiveness of higher education governance. In the second part of this article the author uses the correlation and regression analysis to investigate, if and how the governance indicators and funding goals affect the institution assessments in university and publication prestige ranks.

2 THE COMPARATIVE ANALYSE OF HIGHER EDUCATION CHARACTERISING GOVERNANCE INDICATORS

To compare the higher education governance in European countries, the author considers it to be necessary to analyse three quantitative indicators: number of students, amount of public funding and number of higher education institutions. Traditionally, to compare and characterise higher education systems of different countries internationally, as the indicators are used the number of students and public funding. Also, both of these indicators are included in the Index of Human Development as education characterising indicators (Latvia: Human Development Report 2010/2011, p. 154). The number of students characterises the distribution and availability of higher education, which is one of the goals of the strategy *Europe 2020* (Supporting growth and jobs, 2011, p. 32). It is also said there that state funding has to be the basis of long-term higher education. Lepori points, that the way how the government allocates funding for higher education is one of the main ways of higher education steering (Lepori, 2007, pp. 85–111). The author adds one more quantitative indicator characterising higher education management – number of higher education institutions. They are the only implementers of higher education, in the author's opinion, this indicator characterises state higher education governance, and also the availability and diversity of higher education. Many European countries as well as Latvia have a lot of discussions about the number of higher education institutions and about their usability and goals.

To compare the countries, there will be calculated relative figures of these quantitative indicators. Each higher education governance indicator will be set "European average" assessment limits by the author within one standard deviation from the calculated average. Therefore, basing on the normal distribution, the author identifies those countries, which differ from „European average". At the end of comparative analyse author identify different higher education governance systems, it is the ones which have two out of three indicators outside the limits of „European average".

The selected higher education governance quantitative indicators are investigated by the author in context of the strategy *Europe 2020* education goals. The author also considers it to be necessary to analyse the main goals of European countries' politics for higher education funding together with the governance indicators mentioned above (Modernization of Higher

Education in Europe, 2010, p. 120). These goals explain and justify the differences of quantitative indicators among the included European countries.

Eurydice report distinguishes six main goals:
- *Increase the number of students* (chosen 14 countries out of 24),
- *Increase student diversity* (7 countries),
- *Quality in studies and research* (22 countries),
- *Development of excellence centres* (19 countries),
- *Diversification of higher education institutions* (11 countries),
- *Increase the number of graduates* (17 countries).

Most European countries choose to support financially the *quality in studies and research*, *development of excellence centres*, and *increase the number of graduates*. All these goals are connected with the inner quality of higher education, as they require improvement. In their turn, outer − social − dimension goals are less popular, which is understandable in the current conditions of restricted funding. However, social dimension goals also affect both higher education governance and its quality.

The analysis includes in total 24 European countries[1], of which all except Norway are members of European Union (EU). Some of EU countries (Greece, Turkey, Malta and Luxembourg) were not included in the analysis, because the information necessary for the research about them is not available. The data used in the research are taken from different sources: *Eurostat* data base and several *Eurydice* reports. Information about the number of higher education institutions in European countries is available only for the year 2009; therefore the other data used in the analysis have been chosen exactly for this year.

Number of students. Number of students is one of the characterising indicators of higher education availability, which simultaneously characterises the intellectual potential of the particular country as well. To compare the number of students among different European countries, using the year 2009 data by *Eurostat*, the author calculates the relative indicator: *proportion of students in population aged 20−39.* The selection of this particular age range the author bases on the European statistics data summary, which shows that young people get involved into higher education, starting with the age of 19, but in Scandinavian countries at about 21. Also, the period which a student is at higher education is increased and exceeds the age of 34 (Eurostat, Statistic in focus, Nr 54/2011).

Average in Europe, 15.5% of population aged 20−39 get involved into higher education. Among countries the proportion of students varies from 11%−23%, but the calculated standard deviation is 3.1%. Basing on the normal distribution, „European average" proportion of students is from 12.3% - 18.6% (see Chart 1). The main educational goal of strategy *Europe 2020* is: by 2020 to achieve that 40% of young people not only get involved into higher education, but also graduate from it. In more than a half (14 out of 24) countries the *increase of student number* has been chosen as one of the higher education funding goal (see in Chart 1 darker coloured columns).

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[1] 24 European countries: Austria (AT), Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Germany (DE), Denmark (DK), Estonia (EE), Spain (ES), Finland (FI), France (FR), Hungary (HU), Ireland (IE), Italy (IT), Lithuania (LT), Latvia (LV), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Sweden (SE), Slovenia (SI), Slovakia (SK) and United Kingdom (UK).

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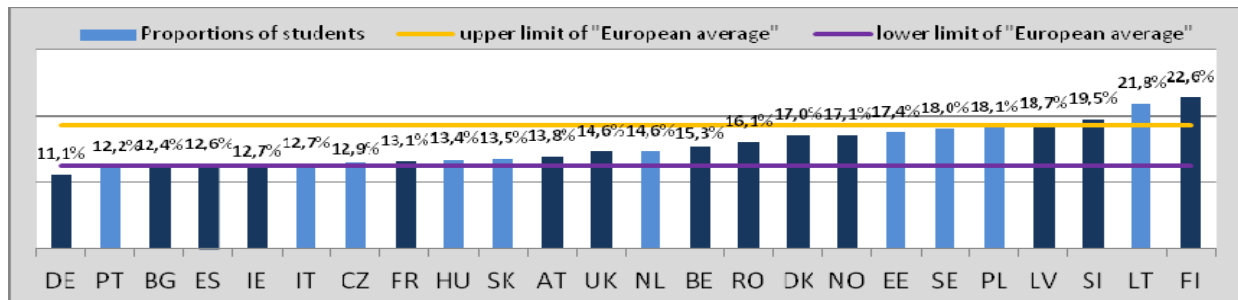
*Chart 1: Proportion of students in population aged 20−39
(Calculated by author using Eurostat data)*

Two European countries, Germany and Portugal have lower proportion of students, accordingly, 11.1% and 12.2%. However, in funding goals the increase of student number is indicated only for Germany. In their turn, high proportion of students is in four countries: Latvia, Slovenia, Lithuania and Finland, accordingly, 18.7%, 19.5%, 21.8% and 22.6%. Increase of student number in funding goals is included for all except Lithuania.

Amount of funding characterises the amount of funding allocated by state to cover the expenses of higher education. European higher education institutions are mostly funded by states. There can be detected four types of higher education funding: based on input indicators, based on performance indicators, funding of particular aims (for example, a state order) and funding a contract. (Modernization of Higher Education in Europe, 2010, p.120) In Europe the most popular ones are the first two funding types, but in most cases countries have the set of mixed types. At the same time it must be taken into account that the different funding types have negative effect on the equality of European higher education.

To compare the funding amount in different European countries, the author uses *Eurostat* data of year 2009 relative indicator: *public expenditures on tertiary level of education as % of GDP*.(Eurostat: Main data tables) Average in Europe in 2009, countries spend 1.5% of GDP for higher education; this indicator varies from 0.79%−2.41%. Calculated standard deviation is 0.5%, this determines the limits of the average indicator − average in Europe countries spend from 0.9%−1.8% of GDP for higher education (see Chart 2).
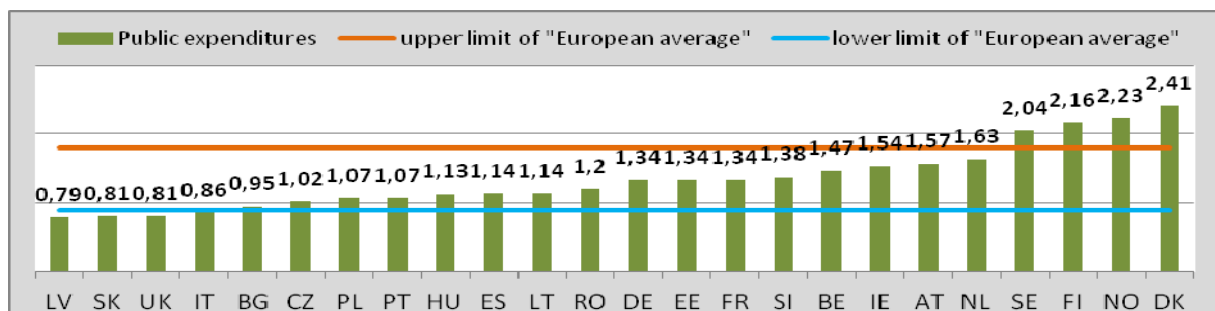
Chart 2: Public expenditures on tertiary level of education as % of GDP (Calculated by author using Eurostat data)

In comparison with 2007, the indicator has increased by almost half percent, it was 1.12% of GDP in 2007 (Modernization of Higher Education in Europe, 2010, p. 120). This increase is bigger if compared with 2000, when average Europe allocated 1.05% of GDP for higher

education. However, there is still the tendency that Northern countries spend more for higher education, but Bulgaria, Italy, Latvia, Slovakia and United Kingdom's allocated funding is less than 1% of GDP. Also, in 2009 data, four countries: Latvia, United Kingdom, Slovakia and Italy have comparatively low state funding, accordingly, 0.79%, 0.81%, 0.81% and 0.86% of GDP. In their turn, comparatively high state support for higher education continues to exist for Sweden, Finland, Norway and Denmark, accordingly 2.04%, 2.16%, 2.23% and 2.41% of GDP. Therefore, these countries are united not only by common geographical location, but also by stable economics and similar priorities in higher education development.

Number of higher education institutions characterises state politics concerning higher education governance. Big or small number of higher education institutions testifies of certain state goals concerning higher education availability and quality. Strategy *Europe 2020* determines that the main task of higher education institutions is to promote the prosperity of Europe by educating qualified workforce. Strategy points that: „Europe needs a wide range of higher education institutions" (Supporting growth and jobs, 2011, p. 32). So, big number of higher education institutions is justified if higher education funding goals are to diversify higher education institutions, to involve as big number of students as possible and make it available for everyone.

To analyse the number of higher education institutions in European countries, the author uses *Eurydice* summary data and calculates the relative indicator: *number of students (thousand) average per university* (Focus on Higher Education in Europe, 2010, p. 160). Involved European countries have 5.5 thousand students average per one university. This indicator varies from 0.5 to 14.7 thousand per one university, and the standard deviation is 3.1. The wide range and standard distribution testify that European countries do not have united policy for the governance of the number of higher education institutions. Main political goals of higher education funding are different - only 11 countries as one of the goals consider the diversification of higher education institutions (Modernization of Higher Education in Europe, 2010, p. 120) – see in Chart 3 darker coloured columns.
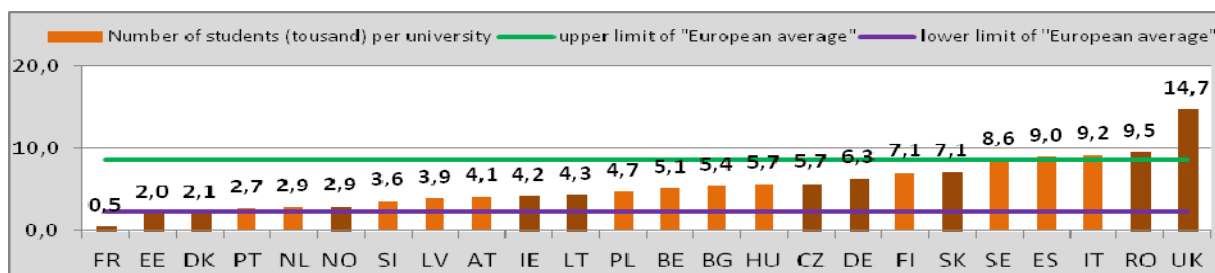
Chart 3: Number of students (thousand) average per university
(Calculated by author using Eurydice and Eurostat data)

The limit of „European average" assessment is 2.3 to 8.6 thousand students per one university (see Chart 2). Comparatively smaller number of students per one university is in France, Estonia and Denmark, accordingly 0.5, 2.0 and 2.1 thousand students per one university. It means that the above mentioned countries have bigger number of higher education institutions than in the majority of European countries. It has increased as a result of higher education expansion, because there have been no limits set for that within the state. Looking at the funding goals of these countries, the author considers that the number of higher education institutions is justifiable. France, where the number of higher education institutions is

particularly big, has indicated both goals as the main ones: increase of student number and diversification of higher education institutions. In its turn, Denmark shows as important the increase of student number (not diversification of higher education institutions), but Estonia - diversification of higher education institutions (not increase of student number).

Remarkably big number of students per one university is in United Kingdom: 14.7 thousand students per one university. This, in author's opinion, testifies for the determined higher education policy and resource management. Italy and Spain also have comparatively few universities, accordingly 9.2 and 9 thousand students per one university. The higher education funding goal of „quality in studies and research" is included for all above mentioned countries.

Generally evaluating the above described quantitative higher education governance indicators, the author considers that we can call such governance systems different, which have at least two out of three indicators outside the set limits of European average. That can be seen most outstandingly in Finland and United Kingdom. Finland has the biggest proportion of students and the third biggest public funding for higher education % of GDP. In its turn, United Kingdom has second lowest public funding and the smallest number of higher education institutions, if calculating the number of students. We can consider as different also the higher education systems in Denmark and Sweden, because they have bigger public funding for higher education than the average in Europe and also the number of higher education institutions is outside the European average. Sweden has in average 8.6 thousand students per one university, which means that there are relatively few universities, but in Denmark there are 2.1 thousand students per one university, which means that there are relatively many universities. For the other involved countries at least two indicators are within the set limits of European average. In the opinion of the author, these differences must be taken into account when doing a deeper analysis of higher education governance indicators.

3 FACTORS INFLUENCING THE ACHIEVEMENTS OF EUROPEAN COUNTRIES IN UNIVERSITY RANKS AND PUBLICATION SCIENTIFIC PRESTIGE

To evaluate the influence of higher education governance quantitative indicators and higher education funding goals, the author considers it to be necessary to analyse the countries' achievements in university and publication prestige ranks. This could be the way how to analyse effectiveness of governance and helps to higher education institutions accountable to society.

Nowadays different higher education ranks acquire more and more popularity, especially in the society, as they demonstrate which country has the best higher education or best universities. Some of European universities are among the most prestige of the world. Most often, the society is not interested in the methodological justification of these ranks; it wants to see evidence for the fact that the resources invested in the higher education are worthwhile. In this part of the article the author investigates the relationships between the above described higher education governance characterising indicators and socially recognised higher education ranks. Founded relationships describe effectiveness of higher education governance. There are examined two ranks: *Webometric* world university rank, where the author counts how many higher education institutions from each European country are included in the world university rank, and *SJR SCImago Journal & Country Rang* scientific journal rank, which uses country's H-index as the comparative indicator. Using statistical

techniques for estimating relationships among variables, the author checks if governance indicators and higher education funding goals affect country's achievements in these ranks. To evaluate country's achievements in these ranks and investigate the relationships, the author uses correlation and regression analysis in two steps. The first step analysis includes 24 in first part of article mentioned European countries. But the second step - 20 European countries, not including the ones which have at least two out of three governance indicators outside the calculated „European average" assessment. In each of the steps the author, at first, makes the correlation analysis to find out if there are statistically essential relationships between factorial and the selected resulting features. In case there could exist such relationships, it must clear out if there is the multicolinearity problem. After that, the author makes the regression analysis separately for each resulting feature, according to the results of correlation analysis.

As factorial features the author uses three above described higher education governance characterising quantitative indicators (relative values) and the six goals of higher education funding:

X_1 – *proportion of students in population aged 20-39;*
X_2 – *average number of students (thousand) per one university;*
X_3 – *state funding for higher education % of GDP;*
X_4 – *goal: increase the number of students;*
X_5 – *goal: increase student diversity;*
X_6 – *goal: ensure quality;*
X_7 – *goal: excellence centre development;*
X_8 – *goal: diversification of higher education institutions;*
X_9 - *goal: increase the number of graduates.*

The author detects two result features:

Y_1 – *number of universities included in Webometric world university rank;*
Y_2 – *H-index which characterises country's scientific publications prestige.*

Step 1: In the first step the relationships are investigated, using 24 European countries mentioned in the previous part. First step correlation coefficients are shown in Table 1.
According to the correlation analysis, statistically significant medium-close relationships exist only for *number of universities included in Webometric world university rank* Y_1 resulting feature with X_1 and X_2 factorial features, correlation coefficients accordingly *-0.430* and *0.502*. Between features X_1 and X_2 there isn't a close and statistically significant correlation (r = -*0,105)*, it testifies that the multicolinearity problem does not exist. It means that both features do not exclude each other and we can do two-factor regression analysis. Correlation coefficients show that we can increase the number of higher education institutions which get into the world university ranks by decreasing the proportion of students or by increasing the number of students per one university, which can be done in two ways. First, by increasing the number of students, but this solution contradicts with the direction of X_1 factorial feature correlation coefficient, which is negative. Second variant is to increase the number of students per one university, by decreasing the number of universities at the existing or smaller number of students.

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Table 1: Correlation coefficients for the first step of the analyse (calculated by author)

Factorial features	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
X_1	1								
X_2	-0,105	1							
X_3	0,376	-0,323	1						
X_4	0,001	0,048	0,262	1					
X_5	0,006	0,091	0,009	0,239	1				
X_6	0,088	0,361	0,004	**0,447***	0,267	1			
X_7	-0,091	0,050	-0,244	0,387	**0,454***	**0,589***	1		
X_8	-0,078	-0,023	0,058	0,099	**0,414***	0,095	**0,406***	1	
X_9	-0,265	-0,002	0,207	**0,478***	0,125	0,247	0,130	0,118	1
Resulting features									
Y_1	**-0,430***	**0,502***	-0,226	0,199	0,013	0,127	0,048	0,139	0,317
Y_2	-0,338	0,345	0,159	0,195	0,095	0,080	-0,123	0,051	0,316

*Correlation coefficient is statistically significant with probability 0,95

For the second resulting feature – country scientific publication prestige (Y_2) - at the first step there were not found statistically significant relationships with factorial features, therefore further analyse for estimating relationships is not done.

Statistically significant correlation coefficients were found between country higher education funding goals. Comparatively closer correlations exist between the goals *ensure quality* and *develop excellence centres*, correlation coefficient is 0.589. There are medium close relationships between the goals *ensure quality* and *increase the number of students*, correlation coefficient 0.447, and also between the goals *increase the number of students* and *increase the number of graduates*, correlation coefficient 0.478. In its turn, the goal *increase student diversity* has relationships with the goals *develop excellence centres* and *diversify higher education institutions*, correlation coefficients accordingly 0.454 and 0.414. The found relationships show the complexity and mutual cooperation of higher education goals. Relationships point to the necessity for the higher education systems to work simultaneously in several directions. This complicated situation has been formed taking into account the diverse needs and wishes of the interested sides in higher education (government, ministries, quality assurance agencies, higher education institutions, students, employers and overall society). Also, in political documents, for example, the goals for education in Bologna process work and strategy *Europe 2020* differ.

In the second part of the first step the author does two-factor regression analysis to investigate if the decrease of student proportion (X_1) and the increase of the number of students per one

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university (X_2) affects the inclusion of higher education institutions in the world university rank tops (Y_1).

Results of regression analysis shows, that, linear two-factor regression model is statistically significant (F-test p-value is 0.05). It explains 39.6% of countries' achievements in university rank tops. Also, both coefficients of regression equation are significant with 95% probability, it means that both proportion of students and numbers of students per one university explain the changes of resulting feature values (Y_1). Calculated regression equation is:

$$Y_1 = 34{,}62 - 225{,}6\,X_1 + 2{,}75\,X_2$$

This regression equity explains the integrated effect of the decrease of the number of students and the number of universities on university prestige ranks. So, simultaneously limiting the number of universities and students, it is possible to attain that higher education gets involved only the most appropriate entrants and there are offered just good quality studies. In the author's opinion, such conditions would allow the higher education institutions to achieve excellent results and get appreciated in the world's university ranks. Consequently, decreasing the proportion of students and increasing the proportion of students per one university, which means the decrease of the number of universities, increase the possibilities for country universities to get into world's university rank tops. Also such conditions would allow to governance higher education more effectively and more accountability for society.

Step 2: In the second step the relationships are analysed and investigated using 20 European countries. Unlike the first step, in the second step there were not included United Kingdom, Finland, Denmark and Sweden, because they had two out of three indicators outside the set limits of „European average". Correlation coefficients for the second step are shown in Table 2.

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Table 2: Correlation coefficients for the second step of the analyse (calculated by author)

Factorial features	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
X_1	1								
X_2	-0,263	1							
X_3	0,101	-0,428	1						
X_4	-0,075	0,006	0,361	1					
X_5	0,174	-0,107	0,41	0,242	1				
X_6	0,03	0,429	-0,122	**0,464***	0,308	1			
X_7	0,164	0,186	-0,075	0,406	0,424	**0,728***	1		
X_8	0,04	-0,083	0,213	0,01	0,39	0,099	0,29	1	
X_9	-0,383	-0,028	0,332	0,39	0,099	0,279	0,061	0,0312	1
Resulting features									
Y_1	**-0,521***	0,259	-0,046	0,148	-0,228	0,117	-0,062	0,017	0,318
Y_2	**-0,522***	0,015	0,282	0,161	-0,005	0,017	-0,172	-0,051	0,35

*Correlation coefficient is statistically significant with probability 0,95

Statistically significant medium close relationships exist for both, (Y_1) and (Y_2), resulting features with the factorial feature (X_1), and correlation coefficients accordingly are *-0,521* and *-0,522*. Therefore, by decreasing the proportion of students, it is possible to increase the number of higher education institutions in world's university ranks and country scientific publication prestige.

Similarly to the first step, the second step also detected statistically significant relationships between country's higher education funding goals, which, in the author's opinion, points to the connection of these goals with European countries higher education governance. The goal *ensure quality* has relationships with two other goals *develop excellence centres* and *increase the number of students*, correlation coefficients accordingly 0.728 and 0.464. Although both correlation coefficients are statistically significant, we can perceive the tendency in European higher education to connect the quality closer with excellence and honours, not with the increase of the number of students.

In the second part of the second step there are done two one-factor regression analyses, separately for each resulting feature: *firstly*, to clear out, how the decrease of student proportion affects country's achievements in university ranks; *secondly*, to clear out, how the decrease of student proportion affects country's scientific publication prestige.

One-factor linear regression model on country's achievements in university ranks explains 27.1 %, but on country's scientific publication prestige 27.3%. Both regression models are statistically significant, it can be seen by F-test p-value, which is 0.018 for both models. In their turn, both calculated regression coefficients are not statistically significant with probability 0.95. Therefore the hypotheses supposed in the second step for the regression

analysis are denied. Taking into account the results of second step regression analysis, the author concludes that country's achievements in university ranks (Y_1) and changes in country's scientific publication prestige (Y_2) cannot be linearly explained by the decrease of the proportion of students. In the author's opinion, such results of the second step regression analysis can be explained by the differences in European countries' higher education managements, which were discussed in the first part of this article.

As a result of correlation and regression analysis, the author finds out that achievements in science are not connected with higher education management. It can probably be affected by other factors which are not connected with higher education governance, for example, the number of scientific researchers or institutions, or the public funding for science and research.

4   CONCLUSION

At the end of comparative analyses the author conclude, that there are essential differences among the higher education systems of European countries, which can be seen by the wide ranges of quantitative indicators described above. The range of the proportion of students is comparatively the smallest – the indicator varies 1.5 - 2 times. But the range of public funding is slightly bigger: 2-3 times. The biggest range is in the relative indicator of higher education institutions, not taking into account France and United Kingdom, the number of students average per one university varies 4 - 5 times. Analysing the described higher education governance indicators, the author does not see the opportunity to group the countries, because there are no common features among the countries. The higher education governance of European countries has been differently affected by various processes both in higher education and the development of national economy. However, it did not disturb the formation of united European Higher Education Space in 2010 (Eurostat yearbook, 2011, pp. 193–227). Also, there are accepted and implemented international political documents, for example, European Standards and Guidelines for higher education quality provision, which determines united principles of higher education implementation and quality assurance, but not for higher education governance (Standards and Guidelines for Quality Assurance, 2009, p. 41).

As a result of correlation and regression analysis, the author finds out that changes of countries' achievements in university ranks (Y_1) 39.6% can explain the decrease of student proportion and the number of higher education institutions. Such conditions could be possible to implement if the country limited the number of higher education institutions, but the higher education institutions increased the requirements for the entrants. Such restrictions would allow higher education institutions to increase the overall study quality, acquire higher study results and achieve excellence. And also such conditions would allow to governance higher education more effectively and more accountability for society. However, such conditions contradict with one of the main directions of Bologna process, which states that higher education must be available for everyone. Also, the main goal of strategy *Europe 2020* claims that 40% of young people must get higher education.

The results of the regression analysis prove that the goals of university rank tops are not conformed to the goals of European higher education social dimension development. In the author's opinion, this situation creates misunderstanding in the society and other interested sides in higher education. Looking at it from the point of higher education quality assurance, the author admits that higher education expansion and availability create threats to its quality. Also, Tartu University (*Estonia*) professor T. Maimet admits that excellence and education

availability exclude each other, especially, in small countries with restricted resources (Maimet, 2011, pp. 20). The author agrees with the professor who admits that the achievement of both is a very ambitious goal. It is also proved by the author's research. The goals of European higher education challenge each other and higher education institutions have to do the impossible. They have to ensure high quality studies, which could be available for everyone, having restricted resources. This, naturally, creates discussions about higher education quality and the ability of higher education institutions to ensure that. Such situation intensifies the responsibility of higher education institutions for quality assurance and its demonstration to the society. In the author's opinion, higher education quality must be the question of honour for every higher education institution, because only that way it is possible to aspire to both excellence and availability to all at the same time.

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MANAGING GEN Y IN THE UNITED ARAB EMIRATES: CHALLENGES IN A UNIQUE LABOR MARKET

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ABSTRACT

The demographic trends of the United Arab Emirates (UAE) herald the entry of a large Generation Y (Gen Y) segment into the country's workforce that occurs in tandem with the retirement of the Generation X. Companies in the UAE need to attract and retain talented human resources hence this trend has implications for the continued economic growth of the country. However, little is known about Gen Y in the UAE since research on this young cohort has largely been conducted outside the Arabian Gulf. Furthermore, the asymmetric distributions of the UAE population and labor force by nationality, which are positively skewed for expatriate residents, present a diverse population that poses further challenges in understanding the motivations of this generation. This study examined the life priorities and work preferences of Gen Y Emiratis and expatriates in the UAE to further understand their motivations, strengths and aptitudes that could guide organizations in forming strategies to effectively recruit, retain and integrate this new generation into the nation's workforce. Survey and interview results were analyzed for correspondence between choices made for life priorities and work preferences, as well as differences in the preferences of Emirati and expatriate respondents. Recommendations for the effective recruitment and retention of Gen Y were provided to help organizations manage this young generation who are central to the future of the Middle-East region.

Keywords: Generation Y, Generational studies, Human resource management, Motivation

1 INTRODUCTION

The United Arab Emirates (UAE) population demographics indicate the imminent entry of a large Generation Y (born 1980–1999) segment into its workforce. The country's continued economic growth depends on its ability to attract and retain this new cohort of talented human resources. However, little is known about Generation Y (Gen Y) in the UAE since research on this group has largely been done outside the Arabian Gulf region. Moreover, the asymmetric distribution of the UAE labor force by nationality, which is positively skewed for expatriate residents, presents a diverse and unique workforce composition that poses challenges to understanding the motivations of this generation. This study examines the life priorities and work preferences of Gen Y Emiratis and expatriates in the UAE. It also provides recommendations to organizations for the effective recruitment and retention of Gen Y workers. The findings would provide greater insight into Gen Y motivations, strengths and aptitudes that would help companies organizations manage this young generation who are central to the future of the Middle-East region.

2 LITERATURE REVIEW

2.1 UAE demographic and workforce generations

A *generation* is a cohort of individuals grouped by its age, and shares the historical and social experiences, behavior and beliefs that are common to that time (Kupperschmidt, 2001). There are five commonly accepted generations (Rajan, 2007) grouped by birth years: *Traditionalists*

(1925–1945); *Baby Boomers* (1946–1964); *Generation X* (1965–1979); *Generation Y* (1965–1979); and *Generation Z* (from 2000), all of which are present in the UAE population.

In 2011, the UAE population was estimated at 5.1 million with 19% nationals (Emiratis) and 81% expatriates. The 2010 labor force displayed a similar pattern with 15% Emiratis and 85% expatriates (CIA-The World Factbook, 2011). Table 1 shows the whole population distributed by generation, which indicates that in 2010, Gen X and Y were the two largest demographic groups (35%; 36%) followed by Gen Z (16%). However, by 2015, Gen Y will be the largest group (45%) whereas Gen X will have declined (26%). As official UAE labor force statistics distributed by both generation and nationality are not available, an extrapolation of the population figures to the workforce suggests that the retirement of Gen X will have a large impact in terms of worker replacement numbers and knowledge transfer. Of special concern is Gen Y's entry into the labor market as they will overtake Gen X in sheer numbers by 2015.

Table 1: UAE population, 2005–2015 by generations (US Census Bureau, 2012)

Generation	2005	2010	2015
Traditionalist 1925-1945	70,360 2%	45,057 1%	29,784 1%
Baby Boomer 1946-1964	758,786 19%	567,243 11%	383,721 7%
Generation X 1965-1979	1,682,728 41%	1,752,082 35%	1,513,689 26%
Generation Y 1980-1999	1,190,636 29%	1,811,635 36%	2,588,396 45%
Generation Z from 2000	384,092 9%	799,576 16%	1,264,170 22%
Total	4,086,602	4,975,593	5,779,760

A generation is more than a group of individuals within the same age range. Each cohort is bound by shared experiences of the political, economic and social events of that time, that shape the generation's values, attitudes and behavior (Crumpacker and Crumpacker, 2007). If that is the case, the Gen Y cohort would have shared experiences of life events in the UAE that shaped their values and attitudes. However, it may not be possible to assume that they are a homogenous group who had undergone critical development periods together in the same time and place, and therefore have similar life and work motivations. While Emiratis are citizens; born and mostly raised in the UAE, the expatriates are from diverse countries who had mainly migrated to the UAE for work. With this unique labor market composition, there is likely to differences in life values and work attitudes between the Emirati and expatriate Gen Y workers. A better understanding of these differences from this study would help companies in the UAE recruit and integrate this heterogeneous cohort into its existing workforce.

2.2 Values and motivation: Concepts and instruments from the literature

Values are "desirable states, objects, goals, or behaviors, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behavior" (Busacca, Beebe and Toman, 2010, p. 3). Schwartz's (1994) values theory defines 10 life values by their underlying motivation.

The theory assumes that
   a) individuals differ in importance placed on values;
   b) values are a basis for judging appropriate behavior;
   c) values provide a sense of future goals individuals would like to achieve.

The *Schwartz Value Inventory* (SVI) measures an individual's assessment of the importance of 10 life values grouped into four dimensions:
   - Self enhancement (values: achievement, power, hedonism)
   - Self-transcendence (values: universalism, benevolence)
   - Conservation (values: security, tradition, conformity)
   - Openness to change (values: stimulation, self-direction, hedonism)

Motivation refers to forces acting on or within an individual to direct behavior (Gibson, Ivancevich, Donnelly, Jr. and Konopaskeet, 2006). In the context of work, motivation describes the internal and external factors affecting employee productivity. According to Herzberg's (1968) *two-factor theory*, job satisfaction is affected by extrinsic and intrinsic factors. *Extrinsic* (hygiene) factors do not necessarily motivate a person in his job, but their absence would result in dissatisfaction. *Intrinsic* factors include feelings of achievement, responsibility, recognition. Their absence may not result in dissatisfaction, but their presence increases motivation. Herzberg's theory assumes that hygiene factors must be present to avoid employee dissatisfaction before intrinsic motivators can be used to stimulate work performance.

Herzberg's distinction between extrinsic and intrinsic factors forms the basis for understanding Twenge, Campbell, Hoffman and Lanceet's (2010) model used here to measure work preferences on five motivational dimensions:
   - *Extrinsic* work motivators are tangible rewards such as salary, benefits, promotion opportunities, status of job title.
   - *Intrinsic* work motivators are intangible rewards that reflect an inherent interest in the work that lead individuals to being motivated to work for its own sake.
   - *Leisure* work motivators are rewards that enable a work-life balance such as having flexible work hours and independence from direct supervision.
   - *Social/Affiliation* work motivators are emotional rewards that satisfy the need to be connected to others such as interpersonal relationships with members in work teams.
   - *Altruistic* work motivators are intangible rewards that satisfy the need to help others and contribute to the wider society.

The SVI and Twenge et al.'s motivational model were used here with the assumption that work preferences are the means by which life priorities could be achieved. In other words, individuals who regard *Self-enhancement* (focus on self) as an important life priority are likely to also regard the values of *Achievement, Power* and *Hedonism* as important. Hence, they would be more motivated by *extrinsic* work motivators such as having a job that offers a high salary, status and promotion opportunities.

3   METHODOLOGY

3.1   Sample and instruments
Purposive sampling (Patton, 2002) was used to select participants with the following characteristics: Emiratis; expatriates; aged 20–30 (in 2010); both genders; working adults and

university students from engineering and business fields. Face-to-face surveys and interviews (individual; focus group) were conducted with a self-administered paper-based survey questionnaire and an interview questionnaire. The closed and open-ended questions covered demographics, life priorities, work preferences, and suggestions on strategies for Gen Y recruitment and retention. The quantitative and qualitative data obtained were statistically and interpretively analyzed, respectively. This mixed-methods design enabled method triangulation: when the same questions were asked in both the survey and interview, it compensated for the weaknesses present in using only one method, thus strengthening the validity of the study.

The sample size was 166 respondents of which 79 respondents were surveyed and 87 respondents interviewed (Table 2). 9 surveys and two individual interviews were discarded. The usable datasets were 70 survey returns, 70 individual interviews and 5 focus group interviews (n=15). The results presented here are based on 155 respondents. In this research, ethical issues of confidentiality and participant protection were ensured by deleting participant identifying details and replacing actual names with codes in data processing and publication. Informed consent was handled by explaining to participants the topic being researched, what was expected and that they could withdraw from the study at any time, without penalty.

Table 2: Datasets

Datasets	Usable	Discarded	Total
Survey returns	70	9	79
Individual interviews	70	2	72
Focus group interviews	5 x 3* (n=15)	0	15
Final datasets	**155**	11	166

*5 focus groups with 3 respondents each

3.2 Constructs and measures

Life priorities refer to the guiding principles in life by which individuals assess the importance of 10 personal values combined into four inter-related and interacting groups (Schwartz, 1994). The *Schwartz Value Inventory* (SVI) was adapted to measure an individual's assessment of the importance of 10 life priorities on four dimensions (section 2.2). Table 3 lists the questions that are the operationalized measures of the construct.

Work preferences are the beliefs and motivators that influence employee behavior at work (Dose, 1997). Twenge et al.'s (2010) model was used to measure the importance of work preferences on five motivational dimensions (Table 4). These measures assume that work preferences are the means by which life priorities could be achieved.

Table 3: Life priorities questions

Dimensions	Personal Values*	Measures as survey questions (Q12)**
Self enhancement *(focus on self)*	Power, Achievement, Hedonism	a) Being successful in a high-paying career or profession e) Having lots of free time to relax or do things you want to do f) Being famous
Self-transcendence *(focus on non-self)*	Universalism, Benevolence	c) Living a very religious life d) Being a good parent g) Helping other people who are in need
Conservation *(seeking stability)*	Security, Tradition, Conformity	b) Having a successful marriage c) Living a very religious life d) Being a good parent h) Owning your own home
Openness to change *(seeking change)*	Stimulation, Self-direction, Hedonism	e) Having lots of free time to relax or do things you want to do

*Certain options may overlap values and dimensions. For example, choice of option *c. living a very religious life*, may imply valuing *Benevolence* or *Tradition*.

**Q.12 To what extent are the following goals in life important to you personally on a scale of 5 (One of the Most Important) -1 (Don't Know)?

Table 4: Work preferences questions

Motivational dimensions	Measures as survey questions (Q17)*
Extrinsic	a) Having a job with high salary, status and chances for promotion
Intrinsic	b) Having a job where I can learn new skills and be creative
Leisure	c) Having a job that leaves a lot of time for other things in my life
Social/Affiliation	d) Having a job where I can meet a lot of people
Altruistic	e) Having a job where I can help society directly

*Q.17 To what extent are the following aspects about your job important to you personally on a scale of 5-1(One of the Most Important) -1 (Don't Know)?

4 RESULTS AND DISCUSSION

The demographic data showed that the 155 respondents consisted of Emiratis (42%) and expatriates (58%) who were mainly single, male, in their early 20s (20–24 years), employed (42%) or university students (54%). The Emirati and expatriate respondents differed most in their income and living arrangement. More expatriates declared a lower average monthly income (below USD 5,172) and were more likely to live alone.

4.1 Findings: Life priorities and work preferences

Respondents ranked the importance of a set of personal life values that were represented by 8 statements (Table 3) on a 5-point scale *(One of the Most Important [5] - Not Important [2], Don't Know [1])*. The common most important life dimension to Emirati and expatriate respondents was *Conservation*: valuing Security, Tradition, and Conformity. Although *Self-*

transcendence (valuing Universalism, Benevolence) was the second most important life dimension to Emiratis, it was least important to the expatriates (Table 5).

Table 5: Most important life priorities: Emirati and expatriates

Life priorities			
Emirati		**Expatriate**	
Conservation (seeking stability)	56.5%	Conservation (seeking stability)	39.2%
Self-transcendence (focus on non-self)	47.7%	Self enhancement (focus on self)	31.9%
Self enhancement (focus on self)	31.8%	Openness to change (seeking change)	30.0%
Openness to change (seeking change)	29.2%	Self-transcendence (focus on non-self)	27.8%

For work preferences, five work motivational dimensions were ranked based on Twenge et al.'s model (Table 4). Each dimension was represented by a statement, on the same 5-point scale. No differences were found in work preferences ranking between the nationality groups (Table 6). Both Emiratis and expatriates regarded *extrinsic* work motivator as most important and the *altruistic* work motivator as least important. This finding was consistent with the expatriates' low ranking of *Self-transcendence*. However, Emiratis regarded *Self-transcendence* as the second most important life dimension. Hence, it is surprising that they did not desire *a job where I can help society directly.*

Table 6: Work Preferences: Most Important

Work Preferences	**Emirati**	**Expatriate**
Extrinsic motivator	63.1%	67.8%
Intrinsic motivator	46.2%	43.3%
Leisure motivator	30.8%	23.3%
Social/affiliation motivator	21.5%	15.6%
Altruistic motivator	18.5%	12.2%

4.2   Discussion of findings

This study held three main assumptions: (a) individuals value 10 basic priorities in life and their work preferences indicate the means by which they choose to achieve these life goals; (b) there would be a correspondence between life priorities and work preference choices. Hence, the study assumes that individuals who regard the *Self-enhancement* life dimension as most important would value highly *power, achievement*, and *hedonism*. To attain self-enhancement, they would prefer jobs offering *extrinsic* motivators that provide tangible rewards towards that life goal (section 2.2). Also, given the unique UAE labor force composition, with a highly heterogeneous workforce in terms of nationality, culture and background, a third assumption was held: (c) differences are present in the life priorities and work preferences of Emirati and expatriate respondents.

The assumption of a correspondence between choices for life priorities and work preferences was partly supported. *Conservation* was the most important life dimension to both Emiratis and expatriates (Table 5) and they were most motivated by *extrinsic* rewards which is

consistent with the chosen life dimension. To further explain: since respondents seek *stability* in life domains such as family (marriage, home ownership, parenting) and spirituality (religious life), it was expected (and found in the results) that the *extrinsic* motivator was also most desired as it enables the material means to attain such stability.

Interestingly, expatriates ranked both *Self-transcendence* and *altruistic* work motivator as least importance which matched the life priorities and work preferences choices. However, this consistency was absent in the Emirati results. Emiratis regarded *Self-transcendence* as the second most important life dimension yet did not desire *a job where I can help society directly*. This pattern could be an effect of the instrument since only one of three measures for *Self-transcendence* (Q.12g. helping other people who are in need) corresponded directly to the *altruistic* motivator (Q.17e. having a job where I can help society directly) which could have weakened the association. It could also be due to economic factors in the UAE as the country had experienced rapid inflation in the recent years.

The assumption that Emirati and expatriate respondents would show differences in life priorities was also partly supported. Although *Conservation* was most important to both groups, there were differences in the ranking of the other life dimensions. In particular, the second most important life dimension was *Self-transcendence* for Emiratis but it was *Self-enhancement* for expatriates. This pattern could be due to a demographically heterogeneous workforce: Emiratis are citizens with strong familial/societal roots in their own country and their values of Universalism/Benevolence are manifested in the extension of care and concern to the wider local community. However, the expatriates had migrated to the UAE for work and would subsequently return to their countries of origin. Hence, *self-enhancement* or the egocentric needs to achieve career success and be independent are naturally high priorities.

Contrary to the assumption of differences in work motivators between Emirati and expatriate respondents, no differences were found in their ranking of all work preferences (Table 6). Since differences were found in the ranking of life dimensions (besides *conservation*), work preferences were expected to show differences as well. This symmetrical prioritization of work preferences by both groups could be due to factors beyond life values held. The importance placed on *extrinsic* work motivators could be due to the recent high inflationary pressures in the UAE. The rising cost of living would have impacted all residents regardless of nationality.

The importance placed on *intrinsic* work motivators by expatriate respondents was expected since foreign workers are mainly recruited for their strong job skills and work ethics. Hence, having a job with opportunities for career and skills development would be vital to the continued employability of expatriates. However, the same importance given to *intrinsic* work motivators by Emiratis was unexpected. In contrast to the negative stereotyping of Emirati workers by private sector employers as under skilled, unmotivated and unproductive (Mashood, Verhoeven and Chansarkar, 2009), the Emirati respondents seek jobs that offer training and career development prospects. This could be explained by forthcoming changes to employment opportunities for nationals. As public sector employment for nationals reaches saturation (Al Ali, 2008), Emirati Gen Ys would face greater competition for government jobs especially when the cohort becomes the largest demographic group by 2015. Hence, the Emirati Gen Ys would need to develop strong work skills to effectively participate in the private sector job market.

5   CONCLUSION AND RECOMMENDATIONS

In the interviews, respondents were asked for strategies that UAE employers could adopt to recruit and retain Gen Y workers. The main themes from the suggestions indicated that the extrinsic motivator is a factor in both recruitment and retention but the intrinsic motivator seems to gain importance in retention. Hence, this study offers the following recommendations:

- *offer competitive salaries and benefits* so that future/current employees would feel financially secure hence enabling them to fulfill their most important life priority of seeking stability and meeting their need for extrinsic work motivators.
- *offer professional training programs* so that Gen Y employees would feel that they are learning new skills and benefiting from working in the company. They may also regard their important life goal of seeking stability as achievable when they feel that the organization is investing in their career development that enhances their employability.
- *allow creative space and less direct supervision* so that Gen Y employees would have opportunities to bear greater responsibilities and prove themselves. This would fulfill their need for interesting and challenging work that provides intrinsic satisfaction.

With a small purposive sample, this study had presented a limited picture of the unique labor market challenges in the UAE that is not claimed to be statistically generalizable to wider populations. Hence, avenues for future research may include the following: use a larger and more varied sample that includes other occupational types which would capture a more representative Gen Y cohort. Also, as more Emirati females enter the country's workforce, a comparative study on motivators of male and female Emirati Gen Y could reveal different patterns in work preferences that could inform better managerial practices in the UAE.

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THE COMPETITION PROLEMS IN COUNTRIES OF TRANSITION: THE CASE OF MONTENEGRO

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ABSTRACT
The transitional process which lasted for twenty years in Central and Southeast European countries was full of challenges. An effective model for globally oriented development would pursue an export oriented economy, based on knowledge and continuity in improvement of quality of life for citizens and oriented around effective competition. Today, in more and more open and integrated world economy, the problem of the competitiveness undoubtedly occupies central position. Actually, it emerged that more and more intensive competition equally threats to the survival, of both, companies that are not able to transform itself, to be innovative, productive and able to respond to the presses from the environment and whole economy. The fact that problem of competitiveness according to its importance has "over-national" character we can see in example of adoption of so called Lisbon agenda, what presents certain reaction of The European Union (EU) to recognized lagging behind USA and other fast-developing countries from Asia. It adopted in European council in Lisbon 2000 in order that "EU by 2010 become most competitive and dynamic economy in the world, based on knowledge and able for sustained economic improvement with bigger number and with quality work positions and higher social cohesion"and "Europe 2020". In this paper, we start from key knowledge that level of national competitiveness also reflects level of competencies of some country to enable its population to improve their prosperity, what means adequate balance between accomplishments of micro and macro-competitiveness.

Keywords: Competitiveness, Factors of Competition, Stage of Development, Transition

1 INTRODUCTION

The process of transition that was present for almost twenty years in Central and Southeastern Europe countries represented the aim full of challenges. If we place behind so called "privatization fury" especially in its first phase, the transition has been observed as the evolutionary and one-dimension process with clear view on starting and ending points as well

as on trajectory. Therefore, transitional process was mostly executed on the basis of fast and consistent changes with the principle of so -called "Washington consensus"[1]. However, it becomes obvious very quickly that formal change, for example, concerning the law about ownership arrangement or ownership rights, did not signify rooted changes in the practice. Hence, it could be argued that the creation of the appropriated institutions for market is very slow and difficult process. Therefore, the entire achievement, if we can talk about positive progress, can be attained decades and not in years. In that sense it comes true that it was not enough only to "give up" communism, although, objectively observed, process failed to provide desired level of social development for all citizens. Hence, the need for complete transformation of economy in countries of transition, into one efficient, more adequate to market worlds, is still considered as an imperative. That would, especially if we take into account causes, bases and characters of current global financial crisis, mean also "giving up" already mentioned principle of "Washington consensus", what is radical opponent characterized as final breakdown of neo- liberalism. Shortly, this is oriented to an economy that would be directed to export and based on knowledge, followed by continual efforts related to increment of total quality of life and this is, after all, reduced to demand for rise of competitiveness level of certain national economies.

In this paper, we start from key knowledge that level of national competitiveness also reflects level of competencies of some country to enable its population to improve their prosperity, what means adequate balance between accomplishments of micro and macro-competitiveness. In that sense, starting hypothesis in this paper can be described in a manner that the competitiveness of national economy conditioned by the multiply factors, having in mind that, on the basis of experience of developed countries, one can conclude that the factors based on knowledge and innovativeness, so called non-pricing factors of competitiveness more and more increase level of their importance.

2 THE NEED FOR COMPLETE UNDRESTANDING OF NACIONAL COMPETITIVE ADVANTAGE FOR COUNTRIES IN TRANSITION

Today, in more and more open and integrated world economy, the problem of the competitiveness undoubtedly occupies central position. Actually, it emerged that more and more intensive competition equally threats to the survival, of both, companies that are not able to transform itself, to be innovative, productive and able to respond to the presses from the environment and whole economy.

The development strategy of modern countries and whole regions are presented by the level of competitive advatages. Actually, for hundred years the economists tried to understand the richeness of the country. Adam Smith considered that improvement and work share drive to considerable improvement of the productivity. Neo-classical economists of the 20th century underlined the importance of the investment in capital and infrastructure. However, many countries, even that have been investing in infrastructure did not register the growth. It was shown that investment in physical capital is not sufficient for economical development. The economist analyzed other mechanisms: education and training (human capital, called by modern economist), technological improvement (implemented or created by the country), innovation, entrepreneurship behaviour, macro-economical stability, good state

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[1] The model has been developed by J. Williamson from the Institute for international economy from Washington. Some economists marked it as a manifest of "market fundamentalism", saying that this model is supported neo-liberal economic school of opinions and it primarily was indented to be model of development of countries from Latin America.

administration, role of law, transparent institution that are functioning good, lack of corruption, market orientation, responsible government, sophisticated countries, condition of demand, the size of the market, etc.

Question of state competitiveness especially gets attention in the conditions of full globalization that characterize modern business flows what represents rude reality which faced all transition countries, with more or less success. Actually, the globalization as more and more present and intensive process of innovations that reaches to the borders of imaginable technologic development have as a consequence important change of rules on the international market. This underlines the need for rooted changes in business orientation of firms, so "the fight" for preserving existing market and customers becomes more and more aggressive and reckless. These aspects, according to brief findings by Hammer, relating to pre-globalization period, are consisted of (see more; Hammer and Champy, 1994, p. 11):

- Competition become (is becoming) more harsh,
- Various forms of competition are emerging,
- It is evident the occurrence of competition in the framework of niche where similar goods on different markets have been sold on the completely different competition bases,
- Performances that determine most competitive participants on the market quickly become imperative and standards for other participants,
- Initiators companies (start-up companies) no longer are in competition according to the rules but they are able to write quite "new" rules of the game,
- All new technologies change the nature of competition in the way that companies do not expect.

Therefore, the conclusion is that advantages over competition and possible occupying of leading position in certain countries in particular industrial branches or their segments, are hardly and harder highlighted, but experience shows that, by the rule, these aspects last long. Also, practical experiences show that leading positions in international competition often were accomplished only in several branches or companies that succeed to develop such properties.

3 FACTOR OF COMPETITIVNESS, COMPARATIVE AND COMPETITIVE ADVANTAGE OF NATIONAL ECONOMY

Understanding the term and essence of competitiveness concept actually means understanding of essence of prosperity of one country. Better said, this is ability of certain national economy to succeed on the international market what, at the end, should result in better living standard for everybody. Actually, it has been shown that the level of competitiveness of national economy depends on different factors. The same aspects are also related to company level, followed by favorable business environment that triggers introduction of new products and processes and investments. In that sense, we can speak today about so called information economy and the need of giving up paradigmatic base of mass economy. Actually, modern economy represents coexistence of two different kinds of economies: **a)** mass economy and **b)** information economy. Mass economy accepted as a key principle the "volume economy" and was based on two fundamental determinants: a) in production of volume economy and mass exploitation of energetic ingredient such are oil, coal, gas etc; b) mass consumption of material goods and accumulation of material wealth (real assets, capital, luxurious good, etc) for the difference of this.

Contrary, economy of knowledge or information economy is based on the principle of "economy of diversity" with usage of quite less energy, raw materials and labor but accomplishes incomparable better results in economic sense thanks to used additional knowledge, intellectual capital, namely information about production. New quality of products is reflected in entire range of properties such are: design, usability and functionality, duration, products are "more intelligent", spend less energy etc. Looking at whole, difference is reflected between "mass" and "informatics" that is produced in economy, because what today makes additional value is a new quality that emerges with applications of knowledge and information. "Economy of information is fundamentally different from economy of "things" says professor V. Milićević and further states that "traditional companies must change their way of business if they want to stay competitive in new contexts (see more; V. Milićević, 2002, p. 11). These new "rules of the game" that are emphasized by author demand velocity, flexibility and innovativeness, namely, it is focused on "adaptive ability" i.e. competence to innovate, constant learning and changes of productive sense.

Today, in more and more complex environment, companies compete on the basis of knowledge and, on that basis, they acquire key competitive advantage, what objectively induces situation in transition countries more complex. Revised Lisbon strategy[2] is in conditions when it was already obvious that its aim would not be accomplished. In fact, this focus of attention was moved toward the questions that are emphasized here and demand is reflected in a following manner: to ensure knowledge and innovations what could increase and improve investments into researches and development, trigger innovations ICT and sustainable use of resources etc. Hence, through the prism of questions that are considered in this paper, we can almost certainly say that key factors that placed themselves into spotlight are those of non-pricing nature. The contexts that complement the picture about the need of more complete study and integration of "knowledge management" into nowadays businesses are the following[3]:

- "Faster[4], better, cheaper "are key demands in business environment these days; today markets become more and more or almost perfectly competitive and velocity of innovation emerging are more visible (so called innovation leads economies).
- More and more stronger pressure of competition reduces the number of those, i.e. labor, that retain precious knowledge.
- It is evident the improvement of number and varieties of technological and technical innovations what causes giving up of "old" and needs for new occupations.
- Length of time interval dedicated to the experience and knowledge adoption is shortened significantly and decisions must be given immediately; early pensioning and rise of labor mobility lead to faster lost of acquired experience and knowledge.
- The question, any longer, is not if the crisis will come but when it will come; hence the companies often are enforced to go out of the area of primary activity besides that necessary and frequent changes in business strategy, by the rule, result in the loss of knowledge in the area where the company was oriented.

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[2] Today, when the deadline expired, we obviously see that the accomplishments of mentioned strategic aims are still far from planned ones.

[3] "Knowledge management" can be defined as a systematical and organized effort to enable knowledge used in order to improve all business performances of the company.

[4] "In the future, we will have only two kinds of companies-fast and dead". D. Vice (Northern Telecom).

- Most of jobs today is based on so called "soft" factors and company becomes "producer" of information; products and services are more and more complex, encompassed with important information component which is mostly found in prices for products and services.
- Competition race is additionally complicated with the change of "consumer patterns" on one side, while, on the other side, shortage of energy, more and more present poverty are very visible.

For more comprehensive understanding of the problem, namely of the importance of difference among comparative and competitive advantage we consider stances by two authors M. Ferbenks and S. Lindsay[5], that, when we talk about developing countries, found that the reason of those countries stagnation and lagging behind developed countries lies in the fact that the traditional way of competition (see more, Ferbenks and Lindsay, 2003, pp. 25–45). Mentioned authors recommend that existing patterns of market competition must be abolished if these countries wish to use their huge and hidden possibilities. Previous success in developing countries mostly was based on some combination of reach natural resources or other domestic resources, government aid, cheap working force or some other inherited advantage, that we mostly mark as a comparative[6]. However, business in contemporary context shows that in time comparative advantages that certain countries have, are no longer enough to achieve and maintenance high living standard. Besides that, efforts in transformation of comparative advantages, that is easy to support, into competitive fail and it can be seen in a list of global competitiveness (WEF), where many countries rich with natural resources ranked near the bottom. In this sense, previously mentioned key properties that are related to differences between comparative and competitive advantages can be defined in a following way:

- Comparative advantages are, basically inherited[7] i.e. they derive from the availability of natural, namely production factors of a country, inherited economic structures etc, so we can say that they are by their character, static and can be changed only in longer time interval.
- For the difference from previous, competition advantages are dynamic, easy for transformation unlike comparative ones and we can also say that one can influence on these advantages by various state strategies such as: improvement of innovations and technical-technological progress of industrial strategies, by business prone context and taxation policy, improvement of entrepreneurship, management development, income policy and others.
- Competitive advantages are planned and it is necessary and very important role of a state in creation of competitive advantage (so-called "visible hand" of the state).

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5 "Oranje mora; podsticanje skrivenih izvora rasta u zemljama u ravoju"; Translation

6 For example, comparative advantages of Columbia are reach soil, cheal land and cheap working force and, nevertheless, it is second largest exporter of flowers. Exporter number one is Holland that has a little comparative advantages, but Holland obviously has well developed techniques of research and development, sophisticated technology of production and efficient and fast paths for flowers distribution, big local demands etc. Therefore, Columbia has comparative advantages but Holland has competitive advantage, (Ferbenks and Lindsay, 2003, p. 38).

7 Natural contexts lose their importance and it can be proved with one sentence by P. Drucker : "Base resources in economy now are not the capital, natural resources nor working force…this is and will be knowledge" ; (Post capitalist Society)

We also have two constituents of one same process so that comparative advantages can represent good base and support competition and, if well composed, these other advantages can be derived from them.

4 REVIEW OF ACCOMPLISHED LEVEL OF COMPETITIVNESS IN MONTENEGRO COMPARING DEVELOPPED COUNTRIES

Competitiveness is not now limited only to these with prestigious inheritance. "Nations chose prosperity if create such politics, laws and institutions that support the increase of productivity" says M.E. Porter[8]. Global economy enters in new period of acceleration as a result of faster and faster development and penetration of information communication technologies (ICT). World economic forum (WEF) has been studying the competitiveness of the countries for more than three decades. WFI defines national competitiveness as a collection of indicators, institutions and factors which determines productivity levels of one state and establishes feasible current and middle-term level of economic prosperity[9]. Global report about competitiveness examines parameters of economies in order to analyze and direct economic development for long time frameworks[10].

Table 1 presents classification of certain countries by particular phases:

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[8] The Competitive Advantage of Nations (M. Porter, guru of strategic management and professor in Harvard Business School, although sometimes he is called world "management academic". His book "Competitive strategy" written in 1980 had 53 editions and is translated into 17 languages. General conclusion is that this book had changed the approach to executive management to it businesses and industries and still is considered as The Bible of all strategically – oriented managers. After ten years he wrote new "big" book "Competitive nation" where Porter applied his ideas into whole economy.

[9] World Economic Forum, http://www.gcr.weforum.org/, The Global Competitiveness Report, 2009–2010.

[10] Since 1979 WEF has measured competitiveness of group of countries and their companies through the index of global competitiveness (Global Competitiveness Index-GCI). Beside that, World bank 2004 with its own methodology performs researches that are used for ranking of countries by "easiness of business"- Doing Business Report. In second decade, the report of renowned IMD center from Lozano appeared that for the time being comprises 57 countries (IMD World report Competitiveness ranking).

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Table 1: Countries/economies concerning development level reached 2010-2011 (Global Competitiveness Report; The World Economic Forum)

PHASE 1 Economies leaded by factors (38 Countries)	TRANZITION From Phase 1 into Phase 2 (17 countries)	PHASE 2 Economies based on investment (33 countries)	TRANZITION From Phase 2 into Phase 3 (21 countries)	PHASE 3 Economies based on innovation (35 countries)
Bangladesh	Algeria	Albania	Argentina	Australia
Benin	Azerbaijan	Armenia	Barbados	Austria
Ethiopia	Botswana	Bosnia and Herceg.	Chile	Belgium
Burkina Faso	Egypt	Bulgeria	Croatia	Czech
Burundi	Gabon	**Montenegro**	Lithuania	Germany
Chad	Honduras	Ecuador	Latvia	Finland
Ghana	Iran	Jamaica	Hungary	Japan
India	Libia	China	Mexico	US
Kenya	Mongolia	Macedonia	Oman	Canada
Nigeria	Qatar	Panama	Poland	South Korea
Pakistan	Libia	Peru	Romania	Cyprus
Tanzania	Sri Lanka	Serbia	Russia	Portugal
Uganda	Saud. Arabia	Tunis	Turkey	Switzerland
Vietnam	Venezuela and others	Ukraine and others	Uruguay and others	Slovenia and others

Review of achieved level of competitiveness for leading countries group on the basis of (*Global Competitiveness Index*[11]-GCI) by particular countries on the basis of Report for 2010-2011 is given in table 2:

Table 2: Rank of leading countries based on Index of Global Competitiveness in last five years (Global Competitiveness Report; The World Economic Forum)

D R Ž A V A	Rank 2012-13.	Rank 2011-12.	Rank 2010-11.	Rank 2009-10.	Rank 2008-2009.
Switzerland	1	1	1	1	2
Sweden	4	3	2	4	4
Singapore	2	2	3	3	5
US	7	5	4	2	1
Germany	6	6	5	7	7
Japan	10	9	6	8	9
Finland	3	4	7	6	6
Netherlands	5	7	8	10	8
Denmark	12	8	9	5	3
Canada	14	12	10	9	10
Hong Kong	9	11	11	11	11
United Kingdom	8	10	12	13	12
Taiwan	13	13	13	12	17

In function of comparison and more comprehensive insight where are situated transition countries these days when compared to the older members of EU, table 3 gives review of achieved competitive level based on countries of „EU27".

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[11] Total ranking in Report of Global Competitiveness was presented with global index of competitiveness of countries (GCI) which is developed for WEF by professor Xavier Sala-i-Martin from Columbia university.

Table 3: Rank „EU27" based on global competitive index in 2012 (Global Competitiveness Report 2012-2013; The World Economic Forum)

Država	Rank in EU	Score (max 6)	Rank WEF
Sweden	1	5,77	4
Finland	2	5,71	3
Denmark	3	5,60	12
Netherlands	4	5.46	5
Austria	5	5,33	16
Germany	6	5,28	6
United Kingdom	7	5,23	8
Luxemburg	8	5,13	22
Belgium	9	5,04	17
France	10	4,98	21
Estonia	11	4,74	34
Ireland	12	4,66	27
Slovenia	13	4,59	56
Portugal	14	4,59	49
Spain	15	4,52	36
Czech Republic	16	4,49	39
Cyprus	17	4,40	58
Malta	18	4.39	47
Latvia	19	4,36	55
Lithuania	20	4,31	45
Italy	21	4,30	42
Slovak Republic	22	4,13	71
Poland	23	4,08	41
Hungary	24	4,06	60
Greece	25	3,95	96
Romania	26	3,79	78
Bulgaria	27	3,76	62
EU	-	4,94	-

The achieved level of national competitiveness in Montenegro is presented based on global index of competitiveness in the last rapport– 2009-2012 compared to previous year is shown in table 4.

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*Table 4: Level of national competitiveness in Montenegro based on four last rapports
(Global Competitiveness Report; The World Economic Forum)*

Index of global competitivness rank (GCI)	Montenegro			
	2012-13	2011-12	2010-11	2009-10
Index of global competitiveness	**72**	**60**	**49**	**62**
Business request:	**74**	**57**	**45**	**65**
1. pillar: Institutions	44	42	45	52
2. pillar: Infrastructure	66	63	67	93
3. pillar: Macro-economic Stability	118	94	37	70
4. pillar: Health and Basic Education	73	59	33	40
Factors that improve efficiency	**74**	**63**	**64**	**65**
5. pillar: Higher education and specialization	51	48	52	57
6. pillar: Market of goods effectiveness	48	39	44	58
7. pillar: Labor market effectiveness	93	45	39	53
8. pillar: Sophisticated financial market	40	35	28	17
9. pillar: Technological specialization	56	53	44	45
10. pillar: Market Size	130	130	129	124
Factors of innovativeness and sophistication	**69**	**59**	**56**	**68**
11. pillar: Business sophistication	76	70	70	80
12. pillar: Innovativeness	60	50	45	56

For more comprehensive insight into state in relation to accomplished level of competitiveness in the region, we give comparison of accomplished level of competitiveness for Montenegro compared to other countries in the refion, table 5.

Table 5:   Comparison of competitivness rank; Montenegro compared to other countries in the region for 2012-2013

Zemlja/Godina	GCI 2009-2010 (133)	GCI 2010-2011 (139)	GCI 2011-2012 (142)	GCI 2012 -2013 (144)
Slovenia	37	45	57	56
Montenegro	**62**	**49**	**60**	**72**
Croatia	72	77	76	81
Srbia	93	79	95	95
Bosnia and Hercg.	109	96	100	88
Macedonia	84	88	79	80
Albania	96	102	78	89

Based on data from tables 1; 2; 3; 4; and 5, and corresponding to underlined aim of this study, we may conclude :

- Report for this year (2012) is most comprehensive of this sort and it comprises 144 countries;
- According to this report, Switzerland occupies top of the scale for the fourth year, followed by Sweden which was on the third position last year, Singapore kept position from the last year-second one, Finland went back for one position, USA lost two positions, Germany kept second position, etc.
- Group of „old members"of EU is followed by Sweden , then Finland, Danmark, Holland etc.; while Estonia from the 11th position, this year arrived on 12th position (as the best renked country in transition that entered EU), Slovenia is on the 13th position, Polland on 14th position and on the bottom of the rank we observe Romania and Bulgeria.

- Estonia (34th position), leading country among transition countries, advanced for two position, Czech felt down from 38st to 39th place, Hungury felt for 12 positions, etc.
- Montenegro felt down and from 60th position felt to the 72nd position in 2012; while best ranked country from ex Yugoslavia, Slovenia, is on 56th place (it increases from last year its position for one place), the worst ranked country is Bosnia and Herzegovina on the 88th position and Serbia on 95th position.
- Montenegro based on „pillars of competitiveness"achieved best note concerning financial market sophistication (40), then institution (44), then higher education and development (56) while the lowest note relates the market size (130).
- Comparing to countries that almost join EU or are candidates (Croatia, Iceland, Macedonia, Serbia, Turkey), Montenegro has after Iceland best note of 4, 39.
- Concerning reached developing phase, countries from this region are differently ranked; **a)** from transition countries in group of countries lead by innovations we have Slovenia, Slovakia, Czech Republic together with USA, Japan, Sweden, Germany and others most developed countries; **b)** in group of countries crossing transition line from "phase 2" into "phase 3" there is Estonia, Hungary, Lithuania, Croatia, Poland, Russia but also Turkey and others; **c)** in group of economies based on investments there is Montenegro, Bulgaria, Ukraine, Albania, Bosnia and Herzogovina, Serbia, Macedonia and others.

5   CONCLUSION

For more comprehensive understanding of purpose of tracing and making of reports about the competitiveness we start from the fact that numerous researches obviously prove that competitive atmosphere in the future, taking as a unit, shapes the following key trends that have a character of discontinuity in relation to the present; a) globalization that enforces the need of competitive advantage creation on the global level; b) privatization; c) unstable character of almost all the industries; d) convergence of various technologies; e) non-determinacy of industrial borders; f) business based on standards; g) reduction of number of mediators; h) sustainable development; i) ecological sensitiveness.

When talking about transition countries, especially those from "domestic" environment, and in the function of necessary shift in relation to different understanding of competitiveness, it is important to know the following; a) the transition from industrial into information era, b) that companies more and more sell information, knowledge, "smart" products and services, what have as a consequence changes of organizational structure and transactions in and among companies; c) that the globalization of the business has a consequence in form of changes inside the process of international work division process in a way that dominance from industrial is being taken over from "nations oriented to the knowledge", while physical, namely work intensive activities "export" to less developed countries, most often in transition countries.

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BASIC COMPARATIVE MACROECONOMIC ANALYSIS USING DIFFERENTIAL GEOMETRY APPROACH[1]

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ABSTRACT
Paper presents a comparative macroeconomic analysis based upon GDP, inflation and stock exchange index time series of Visegrad countries within the period 1997Q1 till 2010Q4. Parametric representation of data in 3-D state space enables to tackle the macroeconomic development as a curve. Based upon differential geometry approach, Frenet frames are constructed at selected set of discrete points along the curve. Investigation of frame translations provides both incremental and accumulated curve lengths, whereas frame rotations may generate traces on unit sphere. Numerical results together with corresponding macroeconomic interpretations of these quantities generated are discussed in detail, and computer implementation is presented, too.

Keywords: *GDP, Inflation, Macroeconomic data analysis, Stock exchange index, Time series analysis*

JEL Classification: C02, C32, C82, E23, E27, E31
AMS Classification: 90C15, 91B51

1 INTRODUCTION

Macroeconomic analysis is a very attractive field of research. Sure, there is also a lot of literature and references devoted to the topic and based upon various techniques and methods. Some of them are focused on summarizing data and monitoring facts, other ones concern theoretical modelling and are based upon various theoretical reasoning, e.g. the New Keynesian approach being the most popular recently, see e.g. (Telínová, 2011), and there are also works and studies which try to apply new sights and different methods. Our paper belongs to this third category.

We are concerned with a comparative macroeconomic analysis based upon GDP, inflation and stock exchange index time series of Visegrad countries within the period 1997Q1 till 2010Q4. A particular analysis of an evolution of the monetary policy transmission mechanisms of V4 countries is presented in (Bartóková, 2010).

Reasoning about the length of investigated period was motivated with three intuitive aspects – first, to eliminate prospective transient development of economy after 1989, second, to include period of relative stable and progressive economic development, and third, to involve periods which were impacted by global financial crisis, too. Parametric representation of data in 3-D state space enables to tackle the macroeconomic developments as curves in the state space. We do believe that our non-traditional approach provides new insights to macroeconomic analysis and is able to build new characteristics.

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2   MACROECONOMIC DATA PROCESSING

We have used the data accumulated and presented in (Telínová, 2004), which had been downloaded from Eurostat, OECD databases and public databases of Stock exchanges of the V4 countries, i.e. Czech republic, Hungary, Poland and Slovak republic, in abbreviation CZ, HU, PL, and SK, respectively. As we have focused our analysis upon three important macroeconomic quantities – GDP, inflation and national stock exchange index, so in total, we have got four sets of three time series with 52 entries each.

Let $_k x$ denotes a 3-D vector time series for k-th country, $k=1,2,3,4$, where the prefix k values are induced by lexicographical ordering of countries, i.e. $k=1 \sim$ CZ, $k=2 \sim$ HU, $k=3 \sim$ PL, $k=4 \sim$ SK. Each $_k x$ has three 1-D time series components denoted $_k x_n$, $n =1,2,3$, where $n=1 \sim$ stock exchange index, $n=2 \sim$ GDP, $n=3 \sim$ inflation rate. Since each of them has 52 entries, we need even more subtle notation to identify any particular entry.

Let $_k x_{n,m}$, $m =1,2,\ldots,52$ denote individual entries. However, for some purposes we need to identify a particulatr year and quarter, too. Hence, we adopt the following notation $_k x_{n,m(i,j)}$, where the index function is $m(i,j)=4(i-1)+j$, where $i=1,2,..,13$ denotes sequence of years 1997, 1998,.., 2010, and $j=1,2,3,4$ stands for quarters of year Q1,..,Q4.

Raw data downloaded for V4 countries are denoted $_k y$ and their entries $_k y_{n,m}$, $m=1,2,\ldots,52$, respectively. However, such data are given in their natural units, which are rather different in their numerical values. In order to make them suitable for our analysis based on differential geometry the raw data $_k y$ have been scaled and transfered into $_k x$ by procedure given by (1) and (2).

$$_k r_n = \sum_{j=1}^{4} {_k y_{n,m(9,j)}} , \quad k=1,2,3,4, \text{ and } n=1,2,3,$$

$$(1)$$

where index function $m(9,j)$, $j =1,2,3,4$, $i=9$, gives values $\{33,34,35,36\}$.

Quantities $_k r_n$ represent the scaling factors and give averaged values for corresponding V4 countries macroeconomic time series. In a role of reference year we have selected the year 2005, hence $i=9$, since we simply accepted this year as a break-year between 'stable development' and period accused by global financial crisis. Of course, it could be a matter of discussion, but the scaling procedure is rather flexible and could be applied for any other selected basis year, a quarter, or another period averaged.

Vector time series $_k x$ with their components are given by (2), where $^\text{T}$ stands for transposition.

$$_k x_{n,m,} = {_k y_{n,m}} /{_k r_n}, \quad m=1,2,\ldots,52, \text{ and } k=1,2,3,4, \ n=1,2,3,$$
$$_k x = \left({_k x_{1,m}}, \ {_k x_{2,m}}, \ {_k x_{3,m}} \right)^\text{T}.$$

$$(2)$$

3   DIFFERENTIAL GEOMETRY APPROACH AND RESULTS

We refer (Chern, Chen and Lam) and (Gray, Abbena and Salamon, 2006) for more details on differential geometry as being short and individual reference selection only. In general, differential geometry deals with curves, surfaces or more general manifolds in analytic way. Hence in order to get a curve, our first step is to define interpolants of $_k x$. First, we choose piecewise linear interpolation, and the second one is cubic spline interpolation, which both provide continuous functions.

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Let $_kp(t)$, $_kq(t)$ denote piecewise linear and cubic spline interpolants of vector time series $_kx$ defined on interval [1,52] given by (3a) and (3b), respectively. Let d be a time series with m entries, then $s_1(t;d)$ and $s_3(t;d)$ stand for scalar piecewise linear and cubic spline interpolants, respectively, defined on interval [1,m], and built by well-known procedures.

$$_kp(t) = (s_1(t;_kx_{1,m}),\ s_1(t;_kx_{2,m}),\ s_1(t;_kx_{3,m}))^{\mathrm{T}},$$

(3a)

$$_kq(t) = (s_3(t;_kx_{1,m}),\ s_3(t;_kx_{2,m}),\ s_3(t;_kx_{3,m}))^{\mathrm{T}}.$$

(3b)

.

3.1 First result

On upper parts of Figures 1-4 we present curves in 3-D space, on the left $_kp(t)$, on the right $_kq(t)$, representing pathes of macroeconomic development of V4 countries (CZ, HU, PL, and SK) using data $_kx$. The points on the curves are located at the following quarters 1997Q1, 1999Q1, 2001Q1, 2003Q1, 2005Q1, 2007Q1, 2009Q1 and 2010Q4, thus giving better insight to movement along the whole time span [1997Q1,2010Q4]. We may conclude that there is not a great difference between piecewise linear and cubic spline interpolants in all V4 countries, at the first sight.

3.2 Second result

Figures 5 and 6 present plots of all four curves in 3-D space. The piecewise linear interpolants $_kp(t)$, $k=1,2,3,4$ of macroeconomic development of V4 countries is given on the Fig. 5, whereas the Fig. 6 brings a bunch of $_kq(t)$. Since we have selected the averaged macroeconomic data of the year 2005 as a reference ones, we add corresponding points at 2005Q1,Q2,Q3 and Q4 to plotted curves, too. Here, we are already ready to see the differences, and these have also motivated us to further analysis, which is presented as the third result. Anyway, a straight-sight and common "U-shape" development of all V4 countries is rather interesting, too. The paper limited space prevent us to give more graphical outputs under various rotations angles.

All computations were performed by sw Mathematica 7.0, WolframResearch Inc., and outputs were in color.

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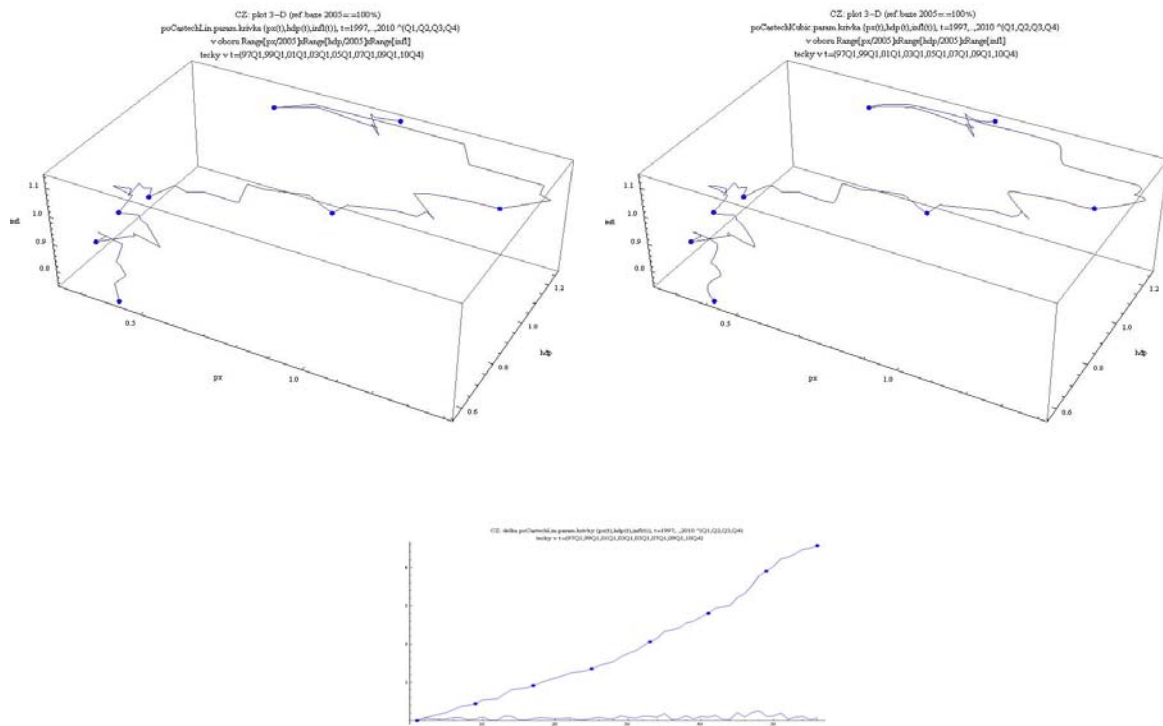
Figure 1: CZ – piecewise linear $_1p(t)$, cubic spline $_1q(t)$, length of $_1p(t)$
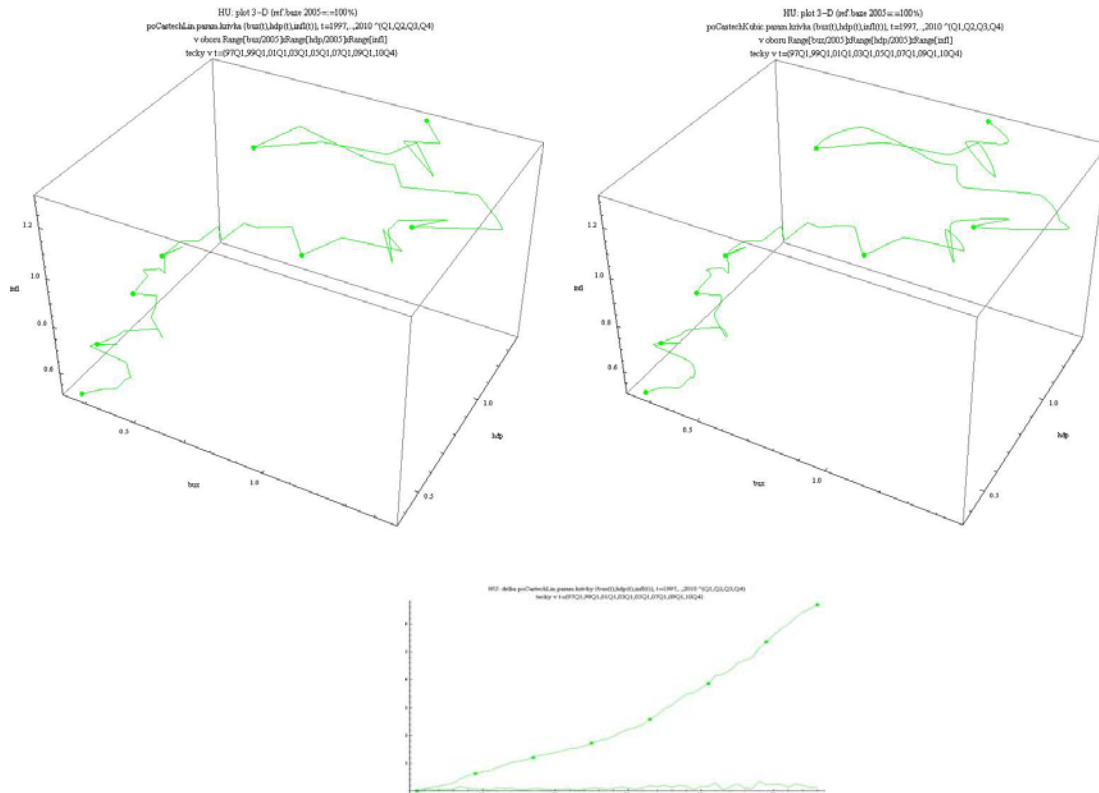
Figure 2: HU – piecewise linear $_2p(t)$, cubic spline $_2q(t)$, length of $_2p(t)$

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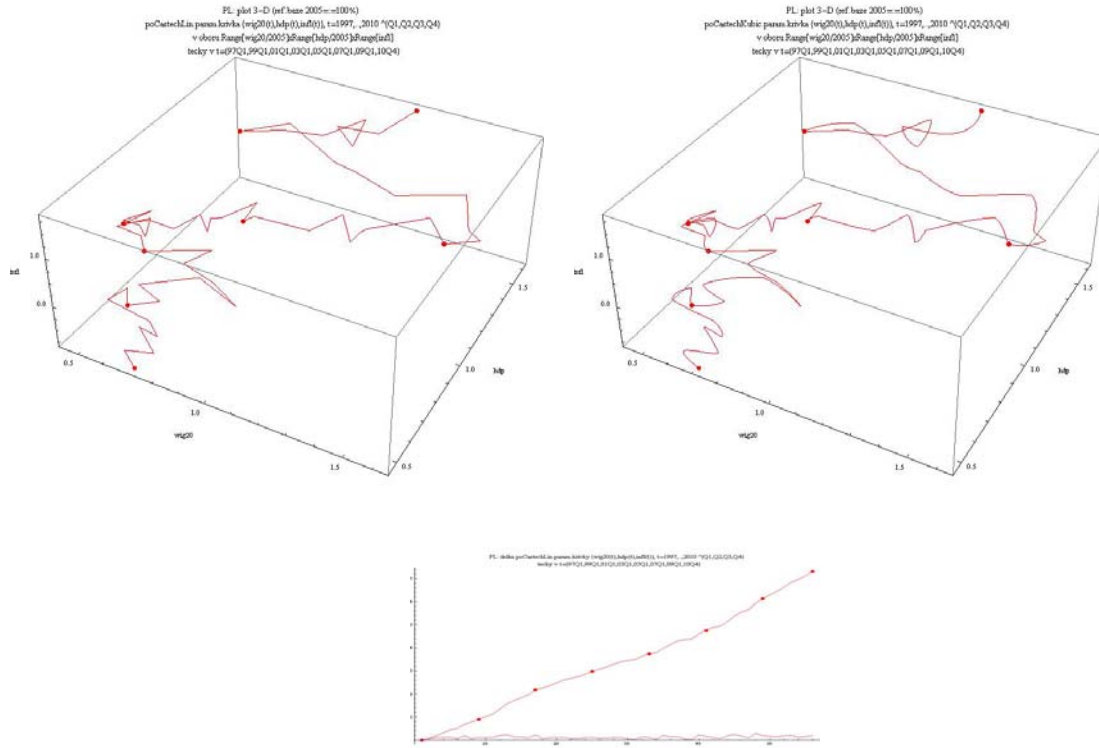
Figure 3: PL – piecewise linear ₃p(t), cubic spline ₃q(t), length of ₃p(t)
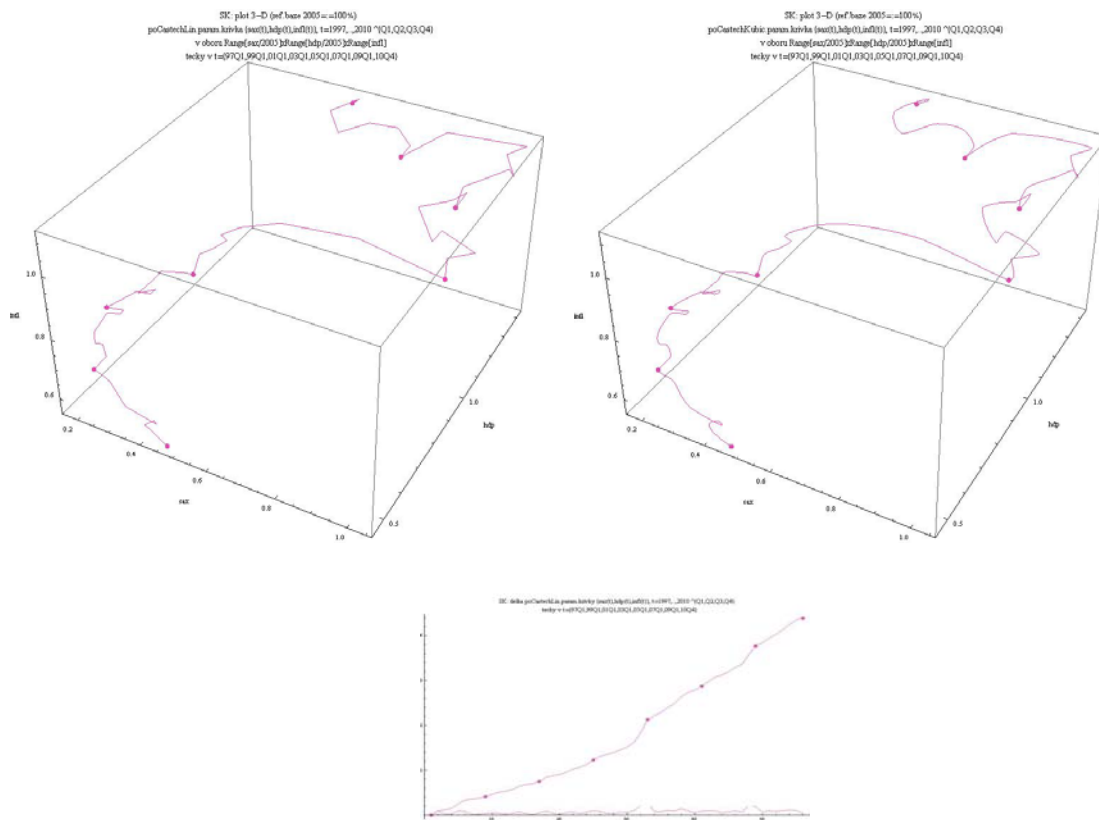
Figure 4: SK – piecewise linear ₄p(t), cubic spline ₄q(t), length of ₄p(t)

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Challenges of the Modern World - Contemporary Economy and Globalization
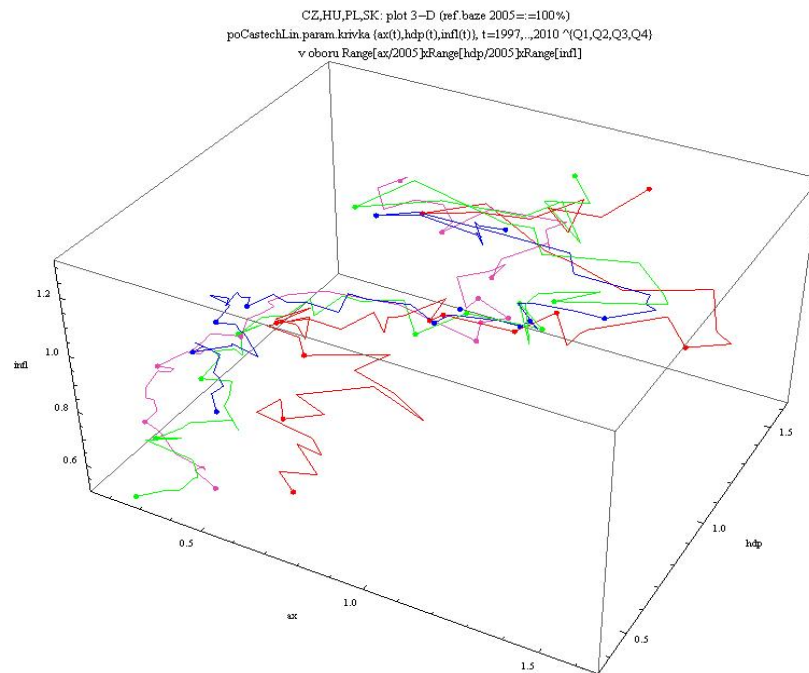
Figure 5: CZ-HU-PL-SK – {₁p(t), ₂p(t), ₃p(t), ₄p(t)}with 2005 Q1,2,3,4 dots
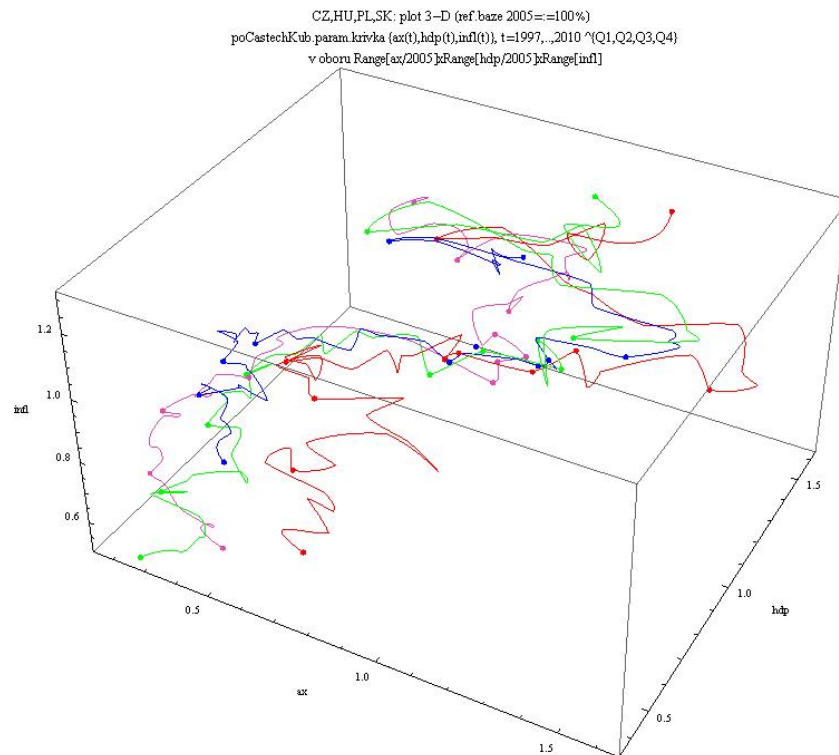
Figure 6: CZ-HU-PL-SK − {₁q(t), ₂q(t), ₃q(t), ₄q(t)}with 2005 Q1,2,3,4 dots

3.3 Third result

Lower parts of Figures 1-4 present lengths of curves $_k\boldsymbol{p}(t)$, and Fig. 7 shows all lengths of {CZ, HU, PL, SK} macroeconomic development curves $_k\boldsymbol{p}(t)$, k=1,2,3,4. The longest curve belongs to HU, the second one as to the lenght has PL, and finally CZ an SK curves are very similar at all. However, inspecting precisely the global lengths by elevation of the 2010Q4 points we identify the shortest path belongs to SK and the length of CZ curve is a little bit longer. Just above time axis t the length increments between adjacent quarter data are depicted. The total length of $_k\boldsymbol{p}(t)$ is calculated simply by addition of corresponding increments.

Differential geometry introduces moving Frenet frame along a curve and provides definition of curve length in 3-D. Let $\mathbf{z}(t)=(z_1(t),\,z_2(t),\,z_3(t))^T$ be a smooth curve defined over an interval [a,b]. Its length $l(a,b)$ is given by (4).

$$l(a,b) = \int_a^b \|\dot{\mathbf{z}}(t)\|dt\,,\quad \dot{\mathbf{z}}(t)=(\dot{z}_1(t),\,\dot{z}_2(t),\,\dot{z}_3(t))^T\,,\quad \dot{z}_n(t)=\frac{dz_n(t)}{dt}\,,\ n=1,2,3. \tag{4}$$
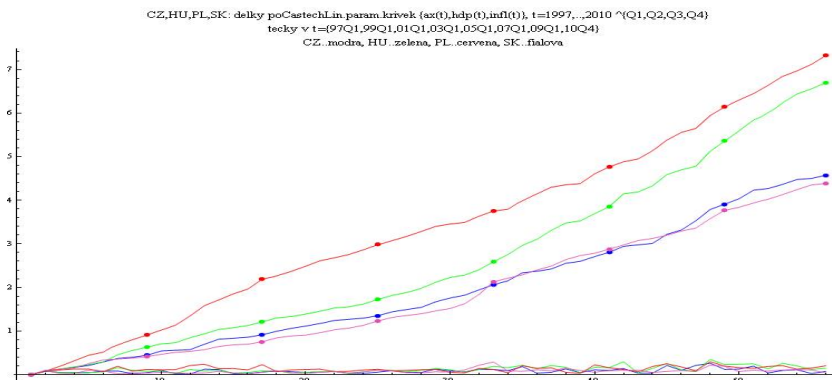
Figure 7: CZ-HU-PL-SK – lengths of {$_1\boldsymbol{p}(t)$, $_2\boldsymbol{p}(t)$, $_3\boldsymbol{p}(t)$, $_4\boldsymbol{p}(t)$}

4 CONCLUSION

We have analyzed some macroeconomic development curves of V4 countries and their lengths by differential geometry approach. We consider the analysis interesting and promising and further research is ongoing.

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CAPITALIZATION OF KNOWLEDGE AND COMPETENCE: A LEVER FOR CHANGING PRACTICES IN THE EDUCATION SYSTEM

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ABSTRACT

In the context of the increasing complexity of modern societies, the challenge of programs in education represents a management challenge the multitude of knowledge included directly in the training programs, knowledge related to the local context of each school and, above all, a challenge of construction common by the actors of the school system, a coherent approach in the exploitation of these multiple of the knowledge and knowledge practical for the good of all actors involved in this process. In this regard, we are engaged, since the application of the methodology of «competence approach» in research to two objectives, one hand the realization a diagnosis established across interviews and questionnaire with the aim devalue the degree maturity of the application of competence approach by the actors of educational system in terms of knowledge sharing and knowledge management, the other hand the realization of a knowledge mapping related to trades of the old of teaching methods and identify the risks to lose. These two missions have led to recommendations enabling a better valorization and transfer of know-how of trades' experts in the sector of education.

Keywords: Competence approach, Knowledge capitalization, Knowledge formalization, Knowledge management, Knowledge mapping, Transfer and sharing of knowledge

1 INTRODUCTION

According to Drucker (1993) the management of human resources is a major challenge for organizations that must meet market logic (*short term*) with development logic (*long-term*), by relying on their most important resource: their collaborators and networks of competencies where latters create acquire and disseminate knowledge. Beyond, the development of competences and knowledge requiring for demarches of long-term associating recruitment career, evolution of careers or training, the Resources Departments have focused in recent years on a prospective management of Human Resources accompanying of development of the organization learning Plan (Sellin, 2011). For it, knowledge management is an important tool to support human resources management because it is connected with the ability to create values and to generate competitive advantage (Seitan, 2009). The knowledge management process provides knowledge in a focused, relevant, cost-effective and timely manner for human resources success with the highest level of professional knowledge. Capturing and subsequent dissemination of knowledge at an appropriate time to the individual who needs it with less search cost is the essence of knowledge management (Seitan, 2009). Several steps have been identified in a process of knowledge management: This is the explanation of tacit

knowledge identified as crucial to organization, sharing of knowledge capital rendered explicit to the form of memory, of the appropriation and of exploitation of a part of such knowledge by the actors of the organization (Nonaka and Takeuchi, 1995) (see Figure 1).
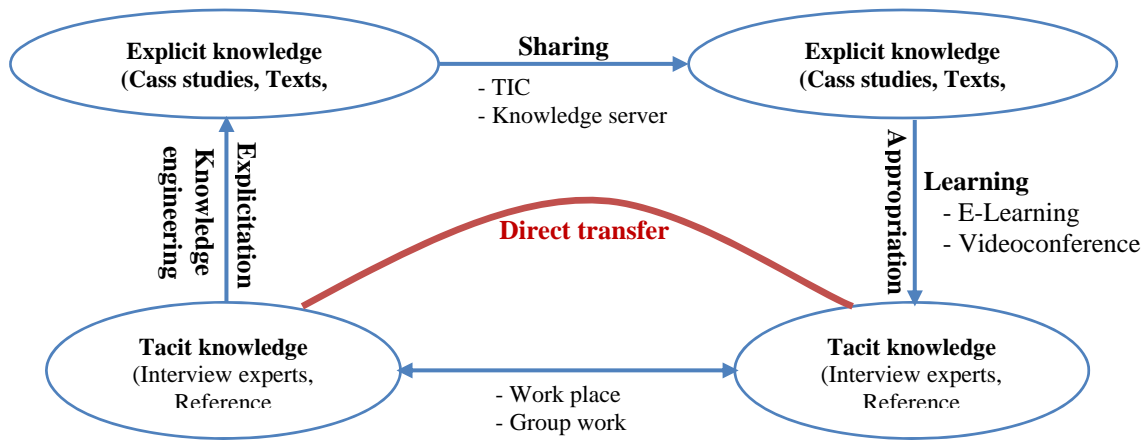
Figure 1: Four modes of creation and knowledge transfer (Nonaka and Takeuchi, 1995)

The primary objective of knowledge management is to preserve the heritage strategic of knowledge, developed over its existence but which remains little explicit and remains tacit at the actors of trades. For this purpose, there are a certain number of methods that are today available to formalize this strategic knowledge heritage. Our aim in this paper is to study one of these methods: knowledge mapping.

In this paper, we are interested, on one hand, on a mapping domains know how of educational carried out by our team in the Normal Superior School of Technological Educational in Oran (*ENSET of Oran - Algeria*) in collaboration with the Directorate of Education of wilaya of Oran in Algeria and on the other hand a diagnostic study by interview and questionnaire to devalue the maturity degree of application competence approach by actors in the educational system and for knowledge sharing.

2   BACKGROUNDS
This section consists in two parts: **knowledge mapping and competency approach.**

2.1   Knowledge Mapping (Knowledge Cartography)
The knowledge cartographed can be acquired, to monitor, to create, to share and finally to capitalize and transfer. Knowledge mapping is a Knowledge Management System described by Aubertin et al. (2007) as «an identification of the heritage of knowledge» that allows «organizations willing to manage their heritage of knowledge to make a detailed useful analysis to their strategy, what is the knowledge they must perpetuate, develop, abandon etc.. Mapping has become a tool decision aid». Effectively the primary finality of these cartographies is the identification of knowledge. Knowledge mapping allows visualizing the knowledge domains of organization within a comprehensible framework (Speel et al., 1999).

In this sense these cartographies enrol in the first steps specific to the valorisation of organizations knowledge: identify the heritage of knowledge and any particularly the knowledge domains upon which the Knowledge Management approach is a priority to obtain

a sustainable competitive advantage (Dudezert, 2008). Moreover, the field of the knowledge mapping presents itself as a research area into emerging where work is identified through the literature (Ermine et al., 2006). There are various approaches to organizing the cognitive resources of an enterprise or agency. We can distinguish however two types of approaches cartographic the first focuses on the classification by process and the classification by domains which organizes the knowledge around the subjects, objects or purposes of common interest which are identified in the organization. In the classification by process (Ermine et al., 2006) classify the method GAMETH (Grundstein, 2003) or the method of (Tseng and Huang, 2005). These approaches are especially developed in activities of design of products. In particular, they have been tested with organizations in France like PSA Peugeot Citroën (Saad et al., 2003) or the SNCF. Subsequently, the classification said by «domains» that start from the analysis of representations of the business on its heritage of knowledge (reference documents and / or testimony of trades actors) and them regroups of the knowledge through domains of expertise and in visualizing them form of map in a conventional and static manner. We distinguish, through our bibliographic research, three approaches in this classification, the knowledge tree method (Authier et Levy, 1992), the method of (Pomian et Roche, 2002) and the method M3C (Tounkara et al., 2005). The latter proposes in parallel to formalize the strategy and to identify strategic competencies and others by achieving a criticality analysis of knowledge domains with the trades. The evaluation of the latter is elaborated on the basis of a library of the criteria or a grid CFK (*Critical Knowledge Factor*) elaborated by the Knowledge Management Club and tested various contexts. The alignment strategic allows cross the two points of view and of identify strategic actions to improve the performance of the organization.

These latest approaches have given rise to numerous applications in enterprises at various levels, through this article, we will fly over five:
Aubertin et al. (2007) have proposed three different approaches for the realization of a mapping by functional classification, which respectively use the organization chart, a classification by process and a classification by domains. Matta et al. (2003) have conducted a project for mapping the knowledge and the technical competence critical within the direction of innovation and research of the INRS. Ermine J. L. (2006) has completed a project in Chronopost International (observatory of trades) which relies on two objectives, firstly, identify the know-how of trades affected by the strategy and, secondly, consider the evolution of critical skills in the future. For this, Ermine JL has elaborated the project in several phases: the first phase is the realization of a mapping business actions strategy by the graphical model approach «a map of knowledge domains» The second phase consists of an analysis of the know-how of trades critical through the use of criticality criteria taking into account the specifics of Chronopost International. Chabot J. L. (2006) has proposed a complete mapping of the different areas of expertise to the company HYDRO-Quebec. However, the primary objective was to identify on the one hand, the areas of knowledge, and on the other hand, to do a study to bring out the critical knowledge domains with the help of the French Society Kadrant. Barroso et al. (2005) have conducted a project in the center of radio pharmacy in Sao Paulo (IPEN). Since the nuclear domain suffers from problems related to this considerable accumulation of the knowledge: such as the risk of non-preservation, the difficulty of transfer, etc... They have developed the project in several steps by using a process approach. The process was described in a conventional manner in the form of flow diagrams linking activities in process. This article positions the knowledge mapping from a perspective of knowledge transfer to introducing a space for sharing and dynamic creation around knowledge.

2.2   Competency Approach

Whenever the term competency is mentioned, a *«know-how – to act»* process is implied. Because of its global and integrating characteristics, acquiring a competency requires learning in motor, affective and cognitive fields. A competency is a system of conceptual and procedural parts of knowledge organized into operating schemes that help identify a problem-task and its solution through an efficient action within a set of situations (Nguyen et al., 2007) (see Figure 2).
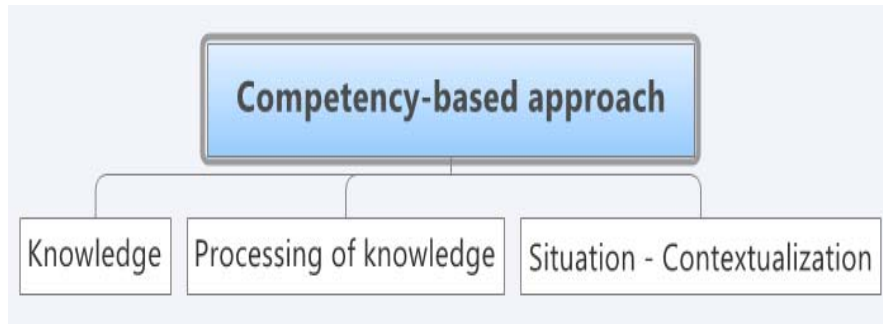
Figure 2: The principle of competency approach

In other words, a competency involves the necessary knowledge and capacities that a given solution requires. As it is possible to evaluate a competency through performance, then a competency is the final stage of a cycle, a period, and determines intermediate and long terms prospects of the learner's development (Scallon, 2004; Tardif, 2006). According to the Minister of Education in Algeria, Establishing a program based on logic that is centered on competencies fits in a set of instructions commissioned by the Ministry of Education. These instructions are based on worldwide research that highlights the importance of the links between learning and context of use, thus helping the learners in making learning meaningful. According to an analysis document published by ELT Algeria (website *created for educators all over the world*) (Louznadji, 2012), competencies have been used in the educational field. Since emphasis is put on the learner's social and personal development, the aim is to make him reinvest his knowledge while performing tasks at school level as well as at social and professional levels. The program has been conceived with the purpose of ensuring sustainable and viable learning.

Although the competency program is a novelty, its objectives are not new. Actually, educationists have always been interested in developing general "know- how" processes and in fixing knowledge acquired in class. This program will allow the Algerian learner to develop his capacity to think and act according to a vision of a world that he will construct day by day.

Through our Bibliographic Research we can highlight the major benefits using practical terms — using a Competency Approach has (1) selection benefits — by defining one candidate as more effective and superior than another thus creating a better fit; (2) provides performance benefits — by clarifying and raising the bar on what is expected; and (3) provides developmental benefits — by setting individual goals that employees can strive to reach that are aligned with the business strategy (Lasnier, 2000).

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In this context, the Algerian school must prepare its students for a society increasingly complex, a labor market increasingly demanding, characterized by international competition. To this, it needs to ensure that every young person acquire the essential skills he needs to be able to continue to learn after that it is to be out to the school, to learn throughout life. Similarly, an overhaul global of the school system is imposed in order to allow the school to be performance, effective and meet the many challenges of our century characterized by globalization of the economy and the amazing of scientific development and technology. Recourse to TIC as part of school learning, all the more that the tool computer is now part, and parcel of the everyday life of the learner. Criteria of skills and qualifications are, from then, more than ever privileged.

3   APPROACH PROPOSED

The objective of our approach, illustrated in Figure 3, is twofold: on one hand, the construction of the map of the Directorate for Education and evaluation of different domains of know-how critical trades teaching in be basing on a work of extracting of knowledge from experts (*teachers, educational advisers, inspectors, etc.*). For this construction, we have used two methods of modeling and knowledge representation, the method GAMETH (Grundstein, 2000, 2003) and MASK II (Aubertin et al., 2007; Ermine, 2006). Other hand, implant a competency approach which emphasizes on the use of tools allowing organization and evaluation / regulation of learning activities.
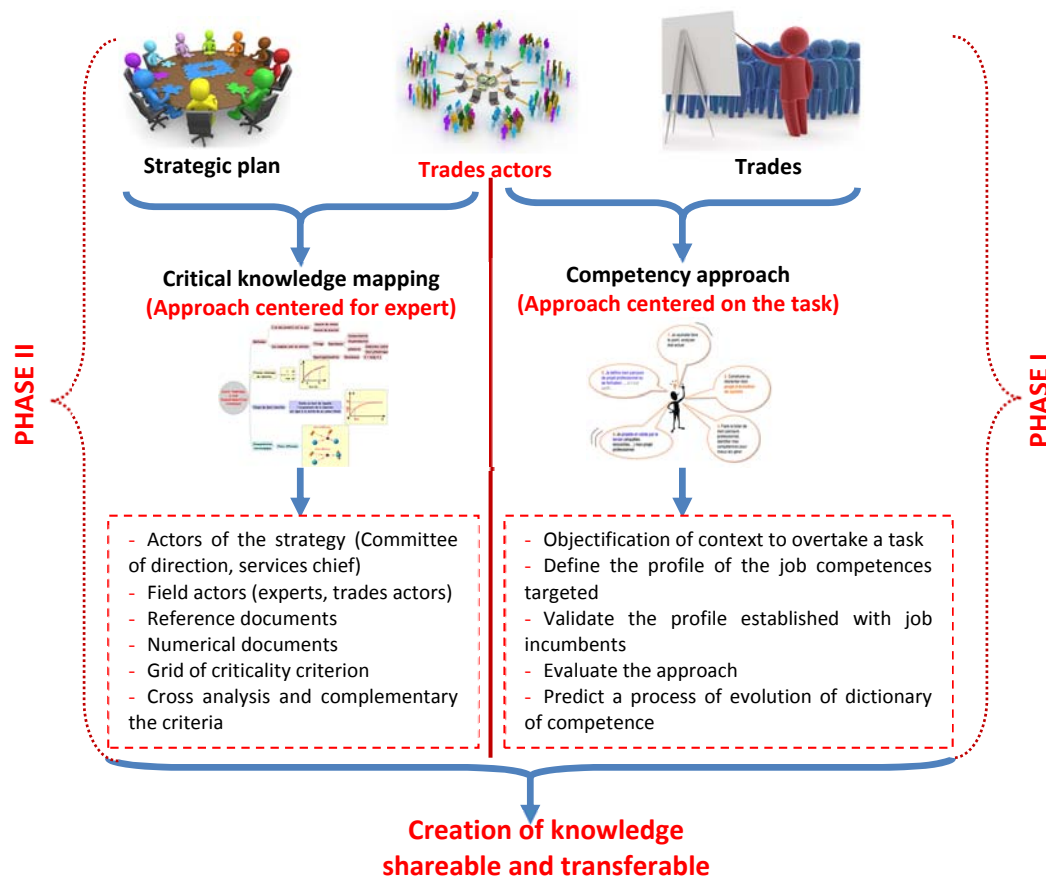
Figure 3: General architecture of the proposed approach

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3.1   Competency approach (PHASE I)

Since a few years, enterprises and professional training have used the competency approach because she aims at the acquisition of knowledge and operationalization of competence specific to a practice. In contrast, education and continuing education, competency approach is gaining ground with increased of the offers training opened, e-learning, training and throughout life e-portfolios. Thus, the competency approach lets you create the link between knowledge, to mobilize its knowledge and resources for realize a task, solve a problem, engage in a project. It does come not only «*apply or return*» as it is often the case in the traditional system, but of a substantive work that allows to give meaning to knowledge acquis in developing its competencies professional.

In the literature, competency revolves around three different approaches (*behavioral approach, strategic approach and trades approach*). In this context, we are interested, in the phase II of our study see Figure 3, the trades approach. The major contribution of the trades approach is to introduce the concepts of expected result and achievement criteria. The approach has as objective aims to implant a competency approach trades in secondary schools of the wilaya of Oran in Algeria to facilitate the acquisition and valorization of competencies and finally maximize the transfer and sharing of knowledge. For it, we explore the organization of this implantation as follows:

1. Determine the objectives referred (**Develop pedagogical competency**)
2. Select the posts for build of the competency profiles (**Teachers of schools secondary**)
3. Define, in collaboration with the Directorate of Education, the competency profile of the target positions (**teachers**)
4. Validate the genre profile established with the incumbents of posts (**teachers**)
5. Define the competency profile of **teachers**
6. Evaluate the approach

According to Bédard et al. (2005), this risk approach, in certain situations, not to make stand out the sharp expertise by a group of employees or a lack of expertise in a critical area that would allow cope with the challenges of the future organization. Of more, this approach does not aim prioritize the competencies according to importance for organization. In this sense, knowledge mapping plays a fundamental role in our approach then that it allows enriching the competency profile of teachers in secondary schools.

3.2   Critical knowledge mapping (PHASE I)

The method of knowledge mapping which we have employee during interviews was initially elaborated by a training organization acted upon by the Director of Education in the wilaya of Oran. Through this study, we explore well the manner in which a method of mapping knowledge can contribute to this explicitation in the context of a transfer. We recall, in this step that the realization of the map was based on analysis of references documents (*organizational chart, description of the distributions of activity services, directory of staff activities, plan medium term (training), studies, balance sheet of training, etc.*) and interviews with trades experts (*teachers, educational advisers, inspectors, etc.*) and the responsible of the education sector (see Figure 4).

Top - Down: Top Management as a starting point
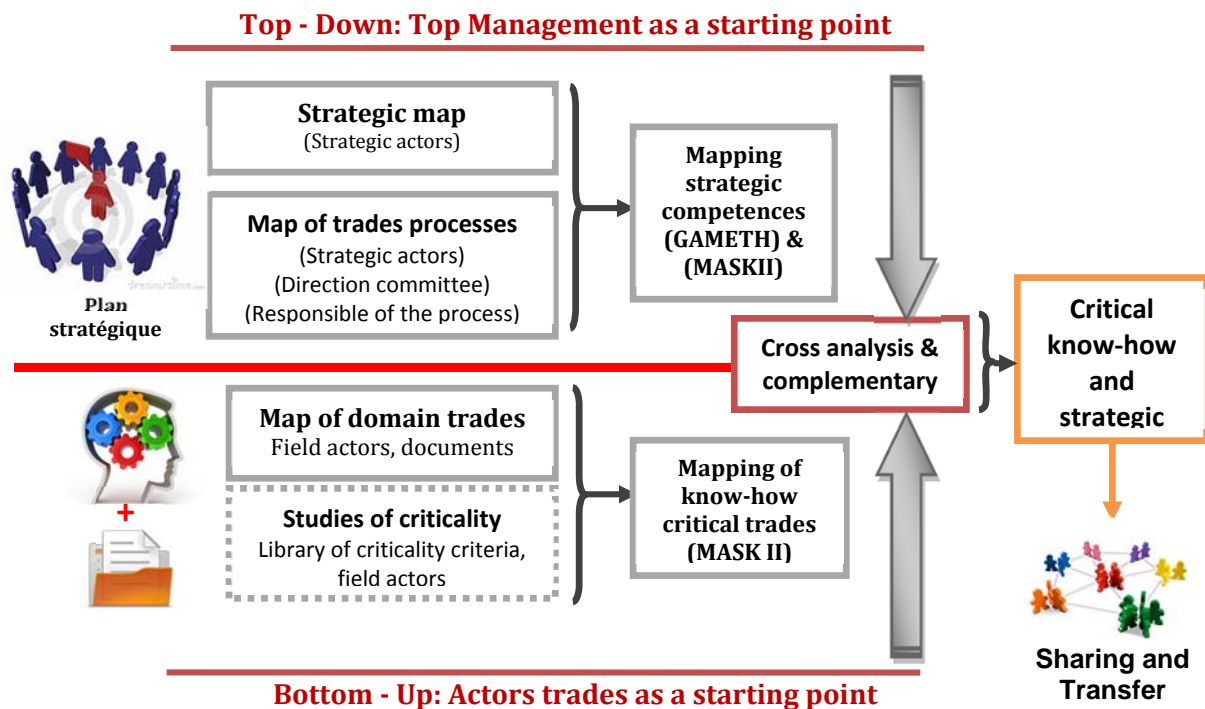
Figure 4: Process of the construction of knowledge mapping critical

3.1.1 Presentation of the Algerian education system

The Algerian educational system is divided into several levels: preparatory, fundamental (*primary and middle*), secondary and finally professional. In this context, and as we have already pointed out, we are interested in secondary education. The latter has as missions, in addition to continuing the general objectives of fundamental education: to consolidate and deepen the knowledge acquired in the various disciplines, to develop the methods and capabilities of personal work and of teamwork and cultivate the faculties of analysis, synthesis, reasoning, judgment, of communication and assumption of responsibility, to offer diversified route allowing the specialization progressive in the different sectors related the choices and the aptitudes of students, to prepare students for the pursuit of studies to reach higher training. For it, our mapping approach is twofold: firstly, to identify the trades knowledge impacted by strategy of the Ministry of Education. Other hand, think about the evolution of critical competency in the future of the Algerian educational system. In order to, provide a tool for visualization and analysis of knowledge / competency.

3.1.2 Developing a map of the strategy

The strategy map was carried in the first instance to document the strategy of the education system identified during a meeting with executives of the direction. It is then complemented and then validated with a few actors of the strategy (unit directors and / or members of the direction committee.

3.1.3 Developing a map of process

The purpose of this step is to present, in the form the process, the main activities of the Directorate. To develop this type of map, we have used the GAMETH approach, developed by Michel Grundstein in 2003. The latter aims to identify locate and characterize critical

knowledge of an organization. For this, the process map was achieved thanks to documents on the referential of competencies of the direction education. Then, this first version of the map has been validated by the actors of the strategy or responsible of training process.

3.1.4   The spotting and the construction of the critical knowledge mapping

This step consists, from reference documentations and optionally interviews, to bring out knowledge domains by the analyzing successive of training departments and their activities and projects.

The reference documentation necessary includes:
- The quality documents
- The documents on production (*publications, studies, activity reports ...*)
- The strategic documents (*Medium Term Plan, former medium-term plans, syntheses ...*)
- The organizational documents (*articles of association, flowchart, descriptive of the distributions of activity of departments, directory of staff activities ...*)

The previous step has allowed a work of analysis of the background on the activities of the Directorate of Education. One proceeds now to the shaping of this analytical work in the important goal of making it accessible and above all usable. In more, it allows building of an initial version of the mapping validated essentially by the operational managers.

From this map, a study, thought, criticality was realized, taking into account the specificities of SEMEP service and expected project mapping. The criteria presented are organized in 4 families:
1. *Difficulty to capture knowledge,*
2. *Difficulty of usage of the knowledge,*
3. *Rarity of the knowledge,*
4. *Utility of the knowledge.*

Each criterion is designed to be valued. For this we have established an evaluation scale for each criterion, based on the evaluation method developed by the Knowledge Management Club or Critical Knowledge Factors (CKF) (Speel et al., 1999; Balmisse, 2005; Ermine et al., 2006). We recall that critical knowledge is knowledge that has value but is difficult to exploit. In our case it is for each knowledge domain (*from interviews*), to assess the risks and opportunities related to the availability, nature, utility for the SEMEP and accessibility of know-how it covers.

From (Aubertin, 2006; Ermine et al., 2005), the criticality of a knowledge domain is to assign a score from 0 to 4 representing the degree of realization of the criterion of grid analysis for each domain. The criticality analysis, through the grid of criticality criteria is to objectively determine which knowledge domains are most critical for the future of the company and to recommend actions to prevent risks in these domains. The domain is more critical, more the note is strong. More the domain is critical within the meaning the criterion evaluated, higher the note is strong. Each evaluation of criterion rests on a synthesized question. When the respondent not knows the answer, a score of 0 is assigned. This note will not be taking into account during the analysis.

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A complementary analysis was conducted on the basis of combinations from the criterion and / or groups of criteria chosen by relation to the objectives of the study criticality; interest of this analysis is that it allows bringing out some specific for example the niches of expertise current / future domains to enhance the highly sensitive domains, etc. A tool (*of type Excel for example*) was used for the restitution of these results in graphical form, especially the form of radar chart (*Kiviat diagram*). The radar charts compare the values of criticalities of knowledge domains aggregated in multiple data series collected from different interviewed (see Fig 5).
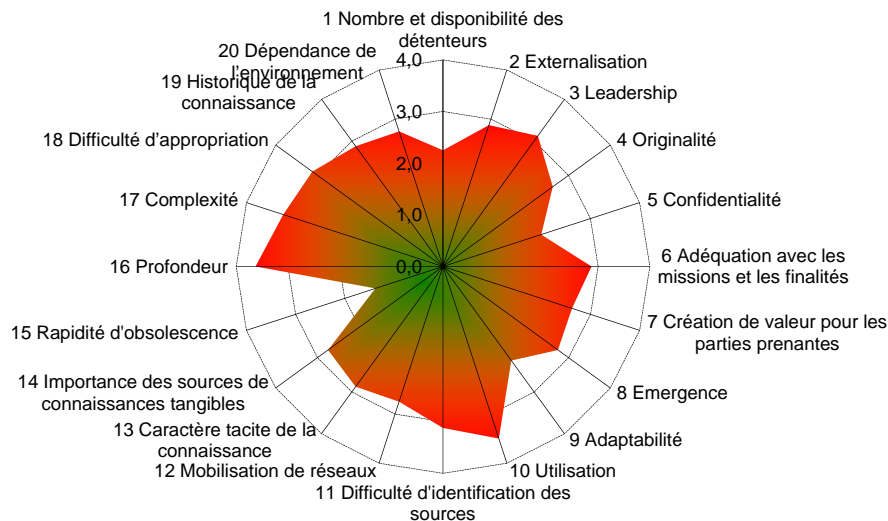
Figure 5: Diagrams for the automatic analysis by Excel tool

The following table shows the advantages and inconveniences of these criticality analysis knowledge domains (see Table 1).

Table 1: Advantages and inconveniences of the automatic analysis

Advantages	Inconveniences

First global vision :
  ▪ **Less effort: « economical»**
  ▪ **A good basis for debate**
  ▪ **A good decision making**
	Does not take into account divergences due, for example, to:
	  ▪ An interpretation of criteria different from one expert to another
	  ▪ The level of expertise of people interviewed
	  ▪ The position and the role of experts (Short/Long term vision, teacher/manager, etc.)

The result is a map of areas of critical knowledge or map of know-how trades / strategic critical (Figure 6).
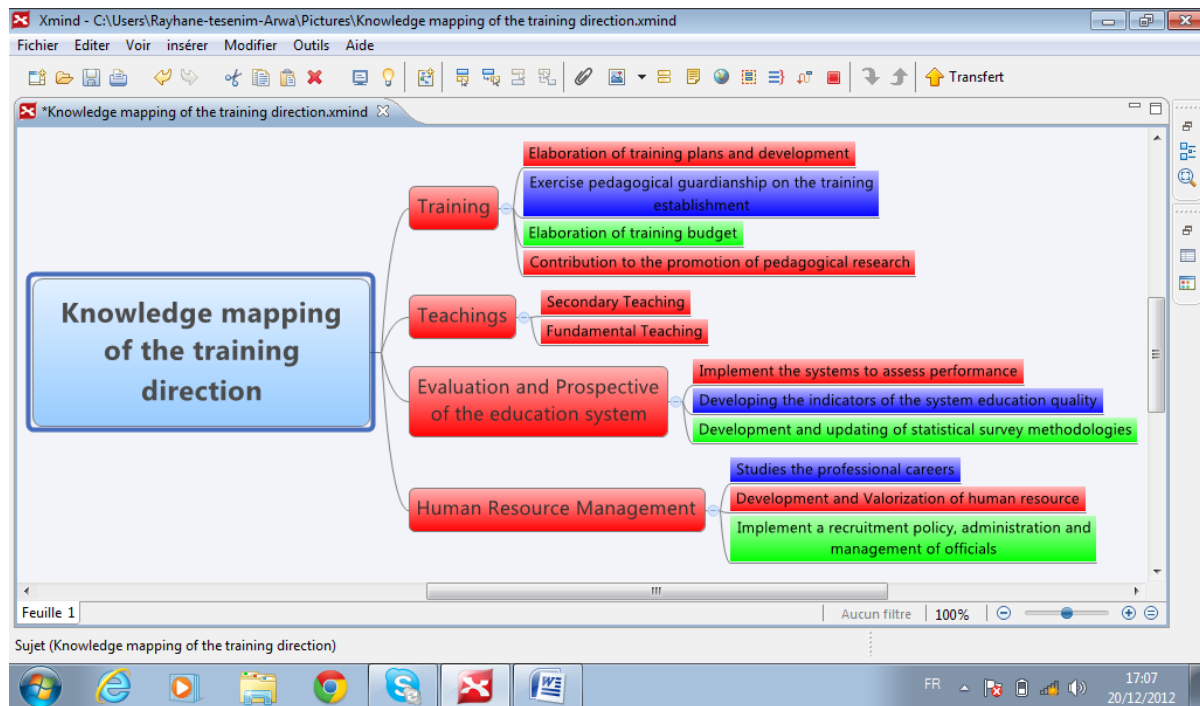
Figure 6: Critical knowledge mapping of the training direction

4 CONSLUSION

The objective of this article was to focus on few ways that allow the transfer and sharing of knowledge in the workplace (teaching). These means are integrated into a comprehensive strategy for knowledge management, as shown by the model illustrated in Figure 3. In this model, methods of mapping knowledge (GAMETH and MASK II) and competency approach aim to trace of the knowledge crucial and holders these last. This is from this analysis that the direction of education (the Secondary School Teachers) will be able to establish a plan to development and transfer of individual and collective of the knowledge. The results of our work offer many perspectives for further research at the theoretical and practical level. Whence, we cite, the following, succinctly few of these perspectives. The establishment means to the learning (*classroom training, e-learning, enterprise portal, knowledge servers, collaborative spaces, and communities of practice*).

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DIVIDEND TAX IMPLEMENTATION EFECTS IN CROATIA

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ABSTRACT
On average, dividends have historically been treated less favorably than capital gains by the tax authorities in the world. The double taxation of dividends at the level of individual investors should have created a strong lack of encouragement to pay or to increase dividends by the companies. Taxes may affect the dividend payment decisions by companies which want to maximize market value. It is known that market value of company is determined by expected after cash flows and any differential tax treatment of capital gains relative to dividends might influence investors demand for dividend. As a result taxes might have important effects on personal investment decisions and corporate dividend policy. Recreantly in Croatia income from dividends was not taxable as of 1st January 2005. But from 1st of March 2012 tax on dividend has been implemented by changes in Income Tax Act. Accordingly to changes in Income Tax Act all dividend earned from 1st of January 2001 is taxed with a rate of 12%. While dividends are taxed, capital gains are not taxed at all. This kind of tax disadvantages can influence on preferences for individual investors to buy stocks of dividend paying companies listed on Zagreb stock exchange influencing on decrease of stock prices for dividend paying companies. The aim of this paper is to investigate what influence implementation of dividend taxation had on companies listed on Zagreb stock exchange. Did the number of dividend paying companies or dividend amount decline accordingly to changes in Income tax Act or there were no changes at all. Did the dividend paying companies adjust their dividend supply accordingly to demand of individual investors?

Keywords: Dividend policy, Dividends, Stock market, Taxes

1 INTRODUCTION

The basic rule of valuation of any asset (in this case stock) is that its value is equal to the present value of expected (after tax) cash flows. Fundamental value of company's stock is determinated by discounted expected after tax cash flows. Consequently, any differential tax treatment of dividend related to capital gains might influence investors' after tax returns and affect their demand for dividends. Accordingly, taxes may affect the dividend payment decisions of managers who desire to maximize market, thereby influencing the supply of dividends (Lease, John, Kalay, Loewenstein and Sarig, 2000, p. 51). Also, from the standpoint of a shareholder, under the assumption of rationality, when the tax rate on capital gains is less than the tax rate on dividends, a shareholder should prefer to receive income in the form of capital gains rather than dividends. Investors should prefer low dividend yield

stocks, and faced with investors' dividend aversion; company should avoid paying dividend or at lease reduce dividend payments. If the tax rate on capital gains is greater than the tax rate on dividends, shareholders should prefer to receive income in the form of dividends.

In contrast to the previously mentioned, one of the most important works on dividend policy, Miller and Modigliani (1961) dividend irrelevance theory, showed that in an ideal world characterized by perfect capital markets, rational behaviour and perfect certainty, dividend policy is irrelevant. Shareholders should be indifferent to receiving dividends or receiving capital gains. But we don't live in the perfect world described by Miller and Modigliani. On the contrary, market imperfections as taxes make dividend policy relevant. Inequity in taxation of dividends and capital gains can cause effect called dividend clientele effects. Dividend clientele effects can be defined as a set of investors who are attracted to the stocks of firms that have the dividend policy they prefer, based on their tax or liquidity circumstances (Ogden, Jen and O'Connor, 2003, p. 479). Company can increase the stock price by adopting a dividend policy that appeals to investors whose preferences are not met by other companies. Many studies examine the issue of dividend clientele but there is no academic consensus about dividend clientele. There are empirical studies which support dividend clientele theory, and empirical studies that provide contradictory evidence. There are two major approaches in testing a tax induced dividend clientele or in testing a tax induced correlation between dividend yield and risk adjusted returns.

The first approach is based on testing the relationship between dividend yield and risk adjusted return whose pioneer is Brennan work in which he made model variation of the capital asset pricing model (CAPM) (Brennan, 1970, pp. 417–429). He states that a security's pre-tax excess return is linearly and positively related to its systematic risk and to its dividend yield. Brennan model implies that higher dividend yield stocks will have lower prices, all else being equal. The two most influential empirical test of the Brennan model are Black and Scholes made in 1974 (Black and Scholes, 1974; referenced by Lease et al., 2000, p. 54) in which they found no evidence of a tax effect. Based on their evidence they advised investors to ignore dividends when forming their portfolios. Second influential empirical test of the Brennan model is Litzenberger and Ramaswamy made in 1979 (Litzenberger, Ramaswamy, 1979; referenced by Lease et al., 2000, p. 54) where they concluded that returns are positively related to dividend yield which can be interpreted as evidence of a dividend tax effect.

Second approach is based on examining the behaviour of stock price around the ex-dividend period. The theoretical analysis of stock price behaviour around the ex-dividend day compares the expected price drop to the dividend per stock. Using this approach Elton and Gruber (1970) examine price movements around the ex-dividend dates of stocks listed in the U.S. stock market. According to them, the equilibrium around the ex-dividend day is such that marginal stockholders are indifferent between selling the stocks with or without dividends. Elton and Gruber (1970) presented empirical evidence showing that the ex-dividend price drop is smaller than the dividend per stock. This evidence is consistent with the hypothesis that investors have a tax-induced preference for capital gains. Elton and Gruber (1970) provide a tax-based argument and stated that ex-dividend day stock prices are set in such a way that marginal long-term investors are indifferent between buying and/or selling before and after the ex-dividend day. Consequently, the ex-dividend day drop in stock price relative to dividends should reflect the differential taxation of dividends and capital gain of long-term investors. Because the tax rate in dividends generally exceeds the rate on long-term capital gains, the stock price does not need to drop by the full amount of the dividend on the ex-

dividend day (Baker, 2009, p. 133). In this paper we shall also examine behaviour of stock price around the ex-dividend day on Croatia capital market, i.e. Zagreb stock exchange. This kind of investigation will be presented in the third chapter of the paper. In the second part of this paper we shall investigate how companies adapted its dividend supply to changes in Income Tax Act where tax on dividend has been implemented. In the fourth chapter there is review of the constitutionality of new amendments to the Income Tax Law and the fifth chapter consists of the conclusion.

2 THE IMPACT OF CHANGES IN INCOME TAX LAW ON CORPORATION DIVIDEND SUPPLY IN CROATIA

Croatian stock market is a relatively young market and until recently, investors could earn a great amount of capital gain so dividends were not in the primary focus of individual investors. But now when the global market and Croatian stock market too, is not in a good position, investors are shifting their focus on dividend paying company. Since they are unsure whether they should trust the company or not, companies try to encourage investors (and to give a positive signal of company situation) to buy their stock with dividend payment. Table 1 shows the number of dividends paid in the previous five years and the amount of dividends paid in the previous five years.

Table 1: Number and the amount of dividends paid in 2008 - 2012 (www.skdd.hr)

Year	Number of dividends paid	Amount of dividends paid (in HRK)
2012 (I-III quarter)	102	896.724.077,29*
2011	93	1.431.335.144,28
2010	97	1.286.129.148,86
2009	108	1.162.570.889,17
2008	135	1.385.432.849,66

*Amount paid in the first three quarter of 2012

As it can be seen from Table 1, 2008 is the year in which the largest number of companies paid the dividend, but the greatest amount of dividends was paid in 2011.

In Croatia income from dividends was not taxable as of 1st January 2005. Dividends and capital gain were not taxable at all from the standpoint of personal investor. On 17 February 2012 the Croatian parliament has enacted amendments to tax legislation, amongst which were amendments to the Income Tax Law. Changes were in taxation of dividends. Receipts of dividends are considered to be capital income and all payments of dividends made on or after 1 March 2012 are taxable at source at the rate of 12%, except for dividends out of retained earnings realized before 31 December 2000. Dividends are not taxable capital income if those receipts were generated pursuant to ESOP program and if dividends are used to increase the

share capital of the company. Amendments have defined a non-taxable threshold for dividends of HRK 12000 per annum. Regardless of the fact that, on the annual level, personal income tax is not paid on receipts of dividends up to HRK 12000, payers are nevertheless obliged to withhold personal income tax at the rate of 12% plus city surtax (if any) on the total amount of dividends paid whilst the recipient of dividends is entitled to claim the non-taxable threshold upon submission of annual personal income tax return. This kind of changes during the year in which payments of dividends and as well as the payment of advance payments of dividend paid up to 29 February 2012, that is, before the Law on amendments on the Income Tax law became effective, where not subject to personal income tax, while all payments of dividends and paid after 29 February 2012 are subject to personal income tax can have influence in adjusting the company's dividend supply. Adapting a moment of dividend payments in 2012, the company may pay a dividend that is not taxed and thus enable the stockholder higher income with regard to pay dividends after 29 February 2012. In this way, adapting to the preferences of personal investors, companies can increase their value through the stock price increase. Large number of dividend paying companies on Zagreb Stock Exchange (ZSE) in 2012 adjusted their dividend policy what can be seen from Table 2.

Table 2: Dividend payment before Law on amendments on the Income Tax law became effective in 2012 (www.skdd.hr)

	Number of dividend payment	Number of advance payment of dividend	Total
January and February 2012	8	18	26
January and February 2011	1	0	1
January and February 2010	1	0	1
January and February 2009	1	0	1
January and February 2008	2	1	3

As it can be seen from Table 2 companies didn't pay dividends in January or February until 2012. With amendments to the Income Tax law according to which all payments of dividends made on or after 1 March 2012 are taxable at source at the rate of 12%, except for dividends given out of retained earnings realized before 31 December 2000, a great number of companies have changed their practice and paid dividends before amendments to the Income Tax Law became effective. In this way a large number of companies avoided paying tax on dividend payments. According to data from Central Depository and Clearing Company and from ZSE in 2012, 102 companies paid dividends, while 25,49% of them paid dividend during first two month of 2012. Companies that have paid dividends before 1 March 2012 have benefited its shareholders. In this way shareholders have received a larger amount of dividends which wouldn't be the case if dividends were paid after 29 February 2012. Companies' benefit from such a timely dividend payments is not the subject of this research, but it certainly represents one of the guidelines for future research.

3 BEHAVIOR OF STOCK PRICE AROUND THE EX-DIVIDEND PERIOD IN CROATIA

There are several important dates between the moment the company announces the dividend and the moment the dividend is actually paid. The first date is the dividend declaration date or the announcement day, the date when the amount of dividend that will be paid is declared for a certain period (usually a year). The next date is cum-dividend date, the last day when stock can be bought with claim to the dividend declared. Stock has to be bought before ex-dividend day if the investor wants to receive the dividend. On the ex-dividend day the stock price will usually fall to reflect the loss of claim to declared dividend. Few days after ex-dividend date is record date. On record date a company looks to see who its shareholders or "holders of record" are. These shareholders will receive the dividends. The final step is dividend payment date.

The tax rate on dividends can vary widely for different investors (individual, pension fund, mutual fund and corporation). It is thus difficult to look at a company's investor base and determine their preferences for dividends and capital gains. A simple way to measure the tax disadvantage associated with dividends is to measure the price change on the ex-dividend date and compare it to the actual dividend paid. As it was mentioned in introduction one of major approaches in testing a tax induced dividend clientele is based on examining the behaviour of stock price around the ex-dividend period. In a world without taxes, ignoring the time value of money, in the short period between the ex-dividend date and the last day with dividend, the stock price should drop by the value of dividend on a stock's ex-dividend day to prevent arbitrage. It is not clear, however, whether the price drop will be equal to the dividend if dividends and capital gains are taxed at different rates (Damodaran, 2011, p. 526).

If shareholder sells stock before a stock goes ex-dividend he will lose the right to the already announced dividend. If he sells the stock on the ex-dividend day he will retain the dividend but he should expect to sell it a lower price. In a rational market the price decrease on the ex-dividend day should reflect loss of claim to declared dividend (D). To see the relationship between price drop and tax rates of the marginal investor, assume that investor has bought stock at price P and that each investor in the company can either sell the stock before ex-dividend day at a price P_B or wait and sell it on ex-dividend day (or after) at a price P_A and that tax rate on dividends is t_D and on capital gain is t_C. The income (I) that investor will receive from selling before ex dividend is

$$I = P_B - (P_B - P)*t_C$$

In this case, by selling before the ex-dividend, the investor receives no dividend, but if the sale occurs after the ex-dividend the income that investor will receive is

$$I = P_A - (P_A - P)*t_C + D*(1- t_D)$$

If the income from selling before the ex-dividend day was greater than the income from selling after for all investors, they would all sell before, resulting in a drop in the stock price. Similarly, if the income from selling after the ex-dividend day was greater than the income from selling before for all investors, they would all sell after, resulting in a price drop after the ex-dividend day. To prevent either scenario, the marginal investors in the stock have to be indifferent between selling before or after the ex-dividend day (Damodaran, 2011, p. 526).

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This will occur only if the income from selling before is equal to the income from selling after:

$$P_B - (P_B - P)*t_C = P_A - (P_A - P)*t_C + D*(1- t_D)$$

Rearranging last equitation we get:

$$\frac{P_B - P_A}{D} = \frac{(1 - t_D)}{(1 - t_C)}$$

A necessary condition for the marginal investor to be indifferent between selling before and the after the ex-dividend day is that the price drop on the ex-dividend day must reflect the investor's tax differential between dividend and capital gains. The statistic $(P_B-P_A)/D$ reflects the marginal tax rate of the marginal stockholder. In particular:

$(P_B-P_A)/D > 1$ marginal investor is taxed more heavily on capital gains.
$(P_B-P_A)/D < 1$ marginal investor is taxed more heavily on dividends.
$(P_B-P_A)/D = 1$ marginal investor is indifferent between dividends and capital gains.

In order to measure the tax disadvantage associated with dividends we measured the price change on the ex-dividend date and compared it to the actual dividend paid. We examined the price behaviour of stocks listed on the ZSE that paid dividend after 29 February 2012 and were traded on ex-dividend day and one trading day before ex-dividend. A problem with research done on ZSE is that only few stocks are liquid enough to be included in sample and the same problem is present in this research where only 12 companies meet criteria in which their stock needs to be traded on ex-dividend day and one trading day before ex-dividend day. Table 3 shows the results of investigation where we used one sample t test to examine are the values (price change on the ex-dividend date compared to the dividend paid) statistically significant different from 1. As it can be seen from Table 3, average price drop was only 52% of the dividend paid after 29 February 2012 and the result is statistically significant at 1 percent level. From the results we can conclude that dividends are taxed more heavily than capital gains and investors on ZSE prefer getting their income from capital gain rather than dividends.

Table 3: One-sample statistics – absolute price change on the ex-dividend date compared to the dividend paid

Number of observations	Mean	Standard deviation	Sig. (2-tailed)
12	0,5249	0,5295	0,01

The influence of implications of dividend tax implementations after 29 February 2012 is evident in the fact that in 2011, when there was no dividend taxation, the average price drop on ex-dividend day, according to dividends paid, was 79% which is much more than it was in 2012.

4   REVIEW OF THE CONSTITUTIONALITY OF AMENDMENTS TO THE INCOME TAX LAW

Recent amendments to the Income Tax Law allowed taxation of dividends and retained profits earned in previous years which opened up the possibility for a request of a review of the constitutionality of these amendments at the Constitutional Court of the Republic of Croatia. The legal basis for such a demand stands is in the constitutional prohibition of retroactive application of the law, which is only permitted in exceptional social circumstances, which would not be the case here. Thus, recent changes which introduced taxation of dividends should refer to dividends paid out of profits earned after the entry into force of these amendments. However, contrary to this view, we outline the view that in this case there is no retroactivity in the taxation of dividends, because it does not exist until the General Assembly decides upon the profit allocation. Operating profit is nothing but the retained earnings, and may remain so until the General Assembly agrees to use it otherwise. According to the Companies Act, the General Assembly is, among other things, authorized to decide about profit allocation. However, that right is to some extent reduced, since the decision about profit allocation comes to the General Assembly via proposals from the board of directors and from a written report and opinion of the supervisory board. The General Assembly may either accept or reject such reports. Only when the board of directors does not submit such proposal or in case of a conflict between the board of directors and the supervisory board, the General Assembly acts as an independent authority and its decision is the sole decision about profit allocation. There are a few constraints arising from the Companies Act when it comes to making decisions about profit allocation. One constraint regards net profit from the current year. It firstly must be used to cover losses carried forward from previous years. Other constraints regard net profit which must be used for legal reserves, reserves for its own shares if the company acquired or intends to acquire them. The final constraint regards statutory reserves if the company has them. When all legal demands have been fulfilled only then can the General Assembly decide to pay dividend or to allocate profit to retained earnings. The legal right to pay-off retained earnings via dividends, realized since 2001 until 2011, presents a reason for conflict between government and management of companies.

It is our belief that there is no retroactivity of amendments to Income Tax Law application because dividend is formed after the decision of the General Assembly about net earning allocation and not before. Therefore the Constitutional Court of the Republic of Croatia, when deciding about possible actions concerning constitutionality, should reject the opinion stated above.

5   CONCLUSION

Investors in Croatia are turning to dividends as a potential income they could earn owning shares. Companies recognizing that are trying to cater demands of their shareholders. Paying dividend or probability to pay dividend has nowadays become a matter of a good company business recognition. Until recently, in Croatia, income from dividends was not taxable as of 1 January 2005. Dividends and capital gain were not taxable at all from the standpoint of an individual investor. On 17 February 2012 the Croatian parliament has enacted amendments to tax legislation, amongst which were amendments to the Income Tax Law. With amendments to the Income Tax law all payments of dividends made on or after 1 March 2012 are taxable at source at the rate of 12%, except for dividends given out of retained earnings realized before 31 December 2000. According to Income Tax Law changes, companies tried to cater investor demands which resulted in a large increase of dividend payment in the first two

months of 2012. Until 2012 only few companies (1% or 2% of dividend paying companies) were paying dividend in January or February. Companies usually paid their dividends in the second and the third quarter of the year. But in 2012, in order to avoid dividend taxation, 25,49% or 26 dividend paying companies paid their dividend before 1 March 2012. Research showed that, from individual investors' standpoint, dividend tax implementation increased dividend aversion evident in price behaviour around ex-dividend day. A simple way to measure the tax disadvantage associated with dividends is to measure the price change on the ex-dividend date and compare it to the actual dividend paid, what was done on ZSE for companies that paid dividend after dividend tax implementation. Results showed that average price drop was only 52% of the dividends paid after 29 February 2012 which implies that investors on ZSE still prefer getting their income from capital gain rather than from dividends and that capital income from taxation standpoint is still preferred to income from dividends.

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GREEN SHAREHOLDER ACTIVISM AS A RESPONSE TO FINANCIAL CRISIS

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ABSTRACT
The growing presence of responsible investors among the shareholders raises the question of their impact on social and environmental policy of the company, in particular during the financial crisis. We discuss whether their activism has the power to change the standards of responsible business policy. In other words, to what extent these responsible investors able to influence, for example, the choice of size of an environmental pollution. The first objective of the paper is to provide an analytical framework of a stock market economy, in which the emergence of coalition of responsible investors with incentives to monitor and restructures companies can be discussed. In particular we introduce the factor of corporate reputation that influences the choice of investments and the factor of chocks of production that put businesses in uncertain conditions of their activity.

Keywords: Green investors, Ecological responsibility, Environmental economics, Financial markets, Socially responsible investing (SRI)

1 INTRODUCTION

The growing presence of responsible investors among the shareholders raises the question of their impact on social and environmental policy of the company, in particular during the financial crisis. We discuss whether their activism has the power to change the standards of responsible business policy. In other words, to what extent these responsible investors able to influence, for example, the choice of size of an environmental pollution. There is no theoretical model of an influence of responsible shareholders on company activity. This allows to examine their impact on the real economy, particularly in terms of the global financial crisis. The first objective of the paper is to provide an analytical framework of a stock market economy, in which the emergence of coalition of responsible investors with incentives to monitor and restructures companies can be discussed. At first we construct a simple model to show that the chosen compensation for environmental damage depends on the sensitivity of investors to the level of pollution. Uncoordinated all firms choose the same amount, so we can say that under conditions of insufficiency of financial resources of neutral agents, the choice of the responsible policy is optimal. Yet this condition is not realized in the real economy, where neutral investors can buy all stocks of polluting industries.

Then we construct an expanded model, where the functions of agents of this economy are rewritten, in particular we introduce the factor of corporate reputation that influences the choice of investments and the factor of chocks of production that put businesses in uncertain conditions of their activity. During the research we examine the model of environmentally responsible investor activism in the absence of the foreign sector (closed economy) and government (there is only the private sector). In previous studies there were two main effects: the direct effect of responsible investment and the effect of signaling. This paper examines another possible effect of the presence of responsible investors as the main shareholder of polluting industries; investors can vote for a modernization of production to reduce environmental

pollution. The existing literature does not offer modeling of this type of shareholder activism, although it could propose interesting and controversial results, such as green shareholders are not looking to supplant ordinary investors from the board of shareholders, another example: anyway all companies are interested in responsible policy, despite the additional costs. Moreover we examine the resistance to stress of responsible investors. They know that even with a reduction of production (as a consequence of the crisis), the company is safe for the environment, which gives a feeling of satisfaction, considered as one of the factors in the analyzed model. Furthermore it affects the reputation of the company, the other important factor of the model.

With regard to this specific factor model it should be noted, that there is no theoretical framework that introduces this aspect in the process of investors' decision-making. An example is the recent research paper of Puncheva Petya (2007) which takes an interdisciplinary approach to explain the role of corporate reputation and she finally proves that shareholders estimate the social and pragmatic legitimacy of the company and its reputation. In this paper we try to model and internalize this factor which enables stimulate the participation of company management in the non profit activity to improve its image.

As the problems of environmental pollution affects almost everyone economists seek to determine the motivation for companies to invest in its environmental policy without government pressure. One point of view is that customers are voting with their feet because they do not want to buy products of irresponsible company, it forces take the additional costs of production (to buy cleaner technologies) to avoid the reduction of sales and profit. But there are also other reasons of responsible policy. In this paper we develop the idea that the company can solve the problem of attraction of stable and loyal shareholders, who invest in the company with more enthusiasm and furthermore they demand smaller dividends, because they receive psychological gains from the collaboration with the ethical business. These shareholders are the reliable partners of the firm. However there is a problem, the reliability of the shareholders is not observable. A possible and practical decision is an application of signal methods. This means, for example, that the company can offers low level of dividends combined with a strong environmentally responsible policy (it is a non-financial compensation). In reality companies with different levels of responsibility can coexist.

2 DISCUSSION OF THE LITERATURE

The responsible investment funds (RIF) have specific traits, because responsible investors receive non-financial (psychological) gains. We model the new preferences of investors. The portfolio managers of RI have two objectives: financial and social. This character multitasking of managers may weaken incentives to receive the big risk-adjusted returns. There are two main approaches: either investors demand an extra return for investing in irresponsible corporations, either they get smaller yields of green investment. These two opposing requirements can influence the cost of business capital and investment decisions of financial institutions. The situation changes significantly from one country to another. In developed countries, for example, in France or the UK there were already a lot of green investment fund at the end of 2001 (38 and 62 respectively) and in emerging countries this practice begins to settle in the minds of investors, so for now its economic effects cannot be significant to change the economy.

The paper of Meir Statman (2000) describes two main effects of the actions of responsible investors:

1. Investment actions effect. Sell the securities of irresponsible companies (for example, those of alcohol producers) or do not buy them. This reduces the supply of capital. The cost of capital increases and new projects may be abandoned because of their non-profitability. But it must be emphasized that this effect depends strongly on the relative weight of ordinary and responsible investors.

2. Effect of policy. This effect is comparatively more important. In general the actions of investors aim to attract the attention of society and politicians, they understand that their direct impact on the cost of capital is not enough large. These actions include, for example, fiscal policy. Additional taxes can reduce the demand for capital.

The emergence of specific traits of responsible investors, who appreciate not only the financial gains, but also "psychological benefits", change traditional priorities of the investor and it influences the overall behavior. The strong positive emotion from the participation in environmental protection may be more important than the financial losses. In their paper (2005) Beal, Goyen and Phillips analyze the principal incentives of responsible investors. They prove that there is not principal motivation (for example, financial and non-financial gains or social changes) that can fully explain the behavior of a responsible investor. For some investors, there is always a compromise between these three motivations. The authors try to build the utility of SRI. It is said that SRI gives the feeling of satisfaction and social status. Finally the authors propose three methods for incorporating non-financial incentive in the classical model:

1. We consider the psychological gains of SRI as the equivalent of pleasure to participate in the game of chance where you can win or lose. The pleasure of participation is independent of the outcome of the game means that the investor receives at the same time the financial gains and utility of pleasure from the investment process. And if investments are not ethical, the investor receives less utility he could obtain without investment.

2. We include the level of "ethicalness" of investment in a utility function of the investor and we obtain the risk-return-ethicalness space. In this model the investor can receive smaller yield if the investment is more ethical. But this is not right for all responsible investors.

3. We consider the ethical investment psychic gains as the equivalent of happiness or well-being from pleasurable activities. In the latter case we can use tools developed by researchers of happiness. Ethical investments provide a flow of pleasure (happiness, psychic gains or experience utility).

In general there are three types of research that are the basis of this paper. The first models different possible effects of the presence of SRI in the economy, including the impact on the behavior of entrepreneurs. The second analyzes the activism of shareholders, their interaction with the managers of the company. And finally the third type of research is related to the reputation and image of the company that affect the traditional goals of the business (profit maximization).

Andrea Beltratti (2003) constructs a macroeconomic model to find the general equilibrium with SRI. The model has two heterogeneous agents, two periods and two types of securities (irresponsible stocks and "safe" bonds). It examines the impact of SRI on the price of the securities. Important factors in the model are wealth of responsible investor and

diversification opportunities. One way, the relative size of the wealth of economic agents is crucial. And another way if the company has the unique traits to become the subject of diversification, it has no strong incentive to be more responsible. The agent made the choice of consumption and investment. The author analyzes the impact of the heterogeneity of agents and externalities of production (as an indicator of corporate social responsibility). It is assumed that the production function depends directly on the loans and specific exogenous shock for each company (negative and positive). The authors consider the externality associated with the specificity of socially responsible investments, in this particular case they interpret it as the negative effect of demand of loans from the company A ("polluting industry") on the utility of agent i ("responsible investor"). The model is simple and it can not show any significant consequences. It concludes that SRI does not have strong impact when the number of responsible investors is small and there is a lot of possibilities for diversification.

Lammerdjan Dam (2007) proposes to construct the model of overlapping generations to complicate the previous model and adapt it to reality. It uses the model OLG (overlapping generations' model) of John Pecchenino and modify the choice of agents. Now it is a choice between "polluting" actions and obligations that are safe for the environment. Future generations will suffer the consequences of the current production of polluting firms. Moreover the environment is a public good therefore there is a free rider problem. In general to decide this problem the government uses fiscal measures. This paper offers the alternative mechanism. It analyzes the dynamic model and adds a parameter of quality of environment. Furthermore we consider two cases: the centrally planned economy and free competition. In conclusion one can note that the stock market can stimulate the responsible development. Lack of coordination between the current and future generations increases the level of pollution. The emergence of the market for property rights can be a good solution to the problem. When the stock market takes into consideration the future, its actions allow the negotiation of future capital, which includes the loss of well-being of future generations related to pollution.

Lammertjan Dam and Ben J. Heijdra (2010, 2011) provide the conception of "warm-glow effect" developed by James Andreoni in 1990 to explain impure altruism. Instead of being only motivated by an interest in the growth of welfare of recipients of investments, the "warm-glow investors" have also the utility of the act of giving, that is to say, they have a selfish motivation. This motivation can arise, for example, from the desire to have a reputation of socially responsible people or philanthropists. These papers analyze the impact of SRI on quality of environment and abatement economy. The authors examine whether environmental policy is effective when consumers themselves have an incentive lied to the "warm-glow motive" to internalize the environmental externalities in their functions. It is found that their responsible behavior partly ensure the positive effects on environmental quality of the abatement policy. The "warm-glow" motivation imposes an implicit tax on the value of the polluting company. It assumes that investors can choose only the "pure" bonds or stocks of irresponsible corporations. The effect of warm-glow requires a growth of premiums to induce them to purchase these shares. The paper assumes also that there is no risk, so the bonds and stocks are perfect substitutes and moreover it analyzes the consequences of two environmental chocks: (1) The continued growth of non-expected level of public abatement financed by taxes and (2) the temporal increase of "warm-glow" parameter.

In the 2001 Heinkel, Kraus and Zechner build the model of impact of the actions of investors on corporate policy. In economics with the boycott of stocks from irresponsible corporations, ordinary investors may receive compensation for these securities declined by responsible investors. There is also a risk of litigation that is related to social policy of the company. It is another cause of growth of securities returns from irresponsible corporations. Positive selection can in turn increase the supply of capital for responsible companies that promote investment in new projects. In this model we assume the existence of two types of investors (responsible and neutral) and companies (polluting and green). Also if the company wants to be reformed, it can attract the attention of green investors. The reforms are seen as the economic effect of the presence of ethical investors. The principal hypothesis affirms that the boycott of stocks increases the cost of capital and promotes the reforms if the refusal is significant and the losses are greater than the costs of corporate reorganization. Here, as in the Beltratti's paper (2003), the relative size of the wealth of economic responsible and neutral agents is very important because it determines the incentives for firms to be reformed. The authors examine the figures and find for them the critical threshold 25%. Empirical evidence shows that the real share of responsible investors do not exceed 10% which is not enough to change the state of the real economy.

The impact of the actions of responsible investors on business decisions and social policy is also examined by Amir Barnea, Robert Heinkel and Alan Kraus. There are three categories of companies: polluting, clean and reformed, and two types of investors: neutral and green. The authors find the Nash equilibrium for three levels of capital costs. When the costs of reform are small responsible investors can significantly change the economic situation, investments in irresponsible companies fall which reduces the total investment. If these costs are large, responsible investors lose power. If costs are middle, the economy receives the maximum of investment if there are only responsible or irresponsible investors.

3   MODEL OF ENVIRONMENTALLY RESPONSIBLE INVESTOR ACTIVISM

To better adapt the theoretical model to reality, we can introduce some conditions. We assume that responsible investors are more stable and loyal to the green company. To differentiate it says that during the financial crisis ordinary investment fund does not buy stocks due to stock market panic. The expanded model has T periods and the letter t is the period number. There are three types of companies: g (green), p (polluting) and r (reformed). The total number of firms is N ($E_g + E_p + E_R$). E_g uses only green capital K_g that brings no loss to the environment; E_p - only capital K_p (polluting technology) and E_R buys K_g and K_p. Suppose that the price of capital K_g is greater than K_p, if not the company E_p has already replaced it and become E_R. To focus on the choice of technology (green or polluting) in this model the labor market is not considered. For simplicity, it says the price of capital includes costs associated with its treatment.

K_p^{it} and K_g^{it} mean polluting and green capital of firm i. and their prices are P_{Kp}^t and P_{Kg}^t. There is the minimum level of capital that the company i has to pay: $K_p^{\min it}$

and $K_g^{\min it}$. This is explained by the existence of supply contracts to ensure continuity of production. One can choose the following contract: it must still pay 70% of the previous level (t-1) of capital. This helps avoid large fluctuations in output

$$CP^{it} = P_{Kp}^t * K_p^{it} + P_{Kg}^t * K_g^{it}$$ - The total cost of production of firm i.

$$CP^{it} = P_{Kp}^t * K_p^{it}$$ For polluting companies and $$CP^{it} = P_{Kg}^t * K_g^{it}$$ for green businesses. $Y^{it} = \Gamma^{it} * f(K_p^{it}, K_g^{it})$ - the final result of production of firm i (its price is equal to one). Γ^{it} is an exogenous shock that is subjective for each company. There are two production shocks: positive $\Gamma^{it} = (1+\theta)$ and negative $\Gamma^{it} = (1-\rho)$.

Finally we describe the function of profit: $\Pi^{it} = Y^{it} - P_{Kp}^t * K_p^{it} - P_{Kg}^t * K_g^{it}$.

DIV^{it} - total dividends paid by firm i. Here one may understand how the company compensates the environmental damage. We assume that to declare as reformed company the polluting company pays the fixed amount $S^{it} = S$. For example, this payment includes the price of the advertising campaign and the payment in fund of type of Greenpeace and so on. For simplicity it is the same for all firms and all periods of time. The purchase of K_g^{it} may be covered by the differences in dividends of green and neutral shareholders. By reducing their dividends shareholders may favor the modernization (through purchase of green capital) of production to reduce its negative impact on the environment. If the number of responsible investors increases, the company is becoming more ethical.

To finance the costs companies issue shares: X^{it} and P_x^t - the number and price of shares issued by firm i. $FD^{it} = P_x^t * X^{it}$ is the demand of financial resources which is equal to the supply of shares issued by the firm i. $FD^t = FD_p^t + FD_g^t + FD_R^t = P_x^t * (X_p^t + X_g^t + X_R^t)$ - the demand of financial resources of three types of firms (= total supply of shares).

$FD^{i0} = CP^{i0}$ it means that the demand of financial resources is equal to production costs of firm i in the period zero. In subsequent periods it satisfies this condition: $FD^{i(t+1)} = \max\{0, CP^{i(t+1)} - (\Pi^{it} - DIV^{it})\}$.

The number of investors is I. There are two types of investors: neutral investors, I_n, they may invest in polluting companies (I_n^p) and reformed (I_n^R) and green investors, I_g, they prefer green companies (I_g^g) and reformed (I_g^R).

$$FR^0 = FR_g^0 + FR_n^0$$ - the financial resources of green and neutral investors at time zero. At first it was the personal wealth of investors (eg, savings), then it includes dividends and difference between purchase and sales price.

To understand the state of the environment, there is PN^t, it is total environmental damage. In this model it is assumed that the ultimate goal of actions of green investors is improving the state of the environment. $PN^t = \sum PN^{it}\left(\underset{+}{K_p^{it}}, \underset{-}{K_g^{it}}\right) = \sum [J(K_p^{it} - K_g^{it})]$, where

J - the estimation of damage in euros.

To prove the necessity of reforms and investments in reformed companies, we write the necessary relationships and they are presented in Table 1:

1) $FD_g^t < FR_g^t$ - the part of green investors are motivated to invest in the reformed enterprises.

2) $FD_p^t > FR_n^t$ - neutral investor resources are insufficient to meet total demand of polluting firms, the share of polluting industries is motivated to be reformed.

We can assume the following scenario of business development. In the period (t-1) firm i suffers from negative exogenous shock of the production and a part of neutral investors sells their shares if the situation is serious (the crisis continues) the company may decide that it will require the additional resources of green investors $\Rightarrow$ it pays the amount S to give a signal positive $\Rightarrow$ E_p becomes $E_R \Rightarrow A_g^{it}\uparrow \Rightarrow (A_g^i / A_n^i)\uparrow \Rightarrow U_g^{kt}\uparrow$. If it creates the coalition, dividends fall to the minimum level and the company gains the full benefits of the presence of a coalition of loyal shareholders and it may invest more in the modernization of its production.

But if the negative shock lasts for several periods, responsible shareholders may leave the company and the firm began buy only the polluting capital K_p, because it is cheaper (transformation to E_p^i). If this company has not ultimately a failure, it must always increase dividends to attract neutral investors (for them it is a primary motivation).

If the company is reformed but there is no green coalition of shareholders, its state is the most dynamic. This is a case that must be analyzed in more detail.

<u>The dividend policy of each type of business.</u>
1) At first we should stress that green business can pay less dividends, because it offers to green investors psychological dividends. E_g does not pay a compensation for environmental damage because it does not harm the environment. So we can assume that the minimum level for the green company is 15% of profit: $div_g^{it} = 0,15 * \prod_g^{it}$.

2) E_p must pay the largest dividends because it uses only the neutral investors' capital. And E_p which lost the confidence of green investors (ex E_R) must pay the largest dividend to be sure that its costs are covered. Levels preferred by neutral investors are 35 and 40%.
$div_p^{it} = 0,35 (\text{ou } 0,40) * \prod_p^{it}$.

3) Regarding the reformed enterprises, with the presence of a coalition of shareholders, they propose finally only 20% of profit. Without coalition the desirable level of dividends is 25%.
The success of reforms of the company depends heavily on its green reputation; it must have enough responsible shareholders to buy the green capital, as these are the additional expenses. The likelihood of attracting new investors depends positively on the number of negative shocks of reformed enterprises already existing. This is the result of business rating by their level of attractiveness. The positive signal (payment of S at time t) will give its consequences only in the period (t +1), because green investors need to see, that the company does it. In addition these actions may attract ordinary investors, because the latter could decide that if the company after a negative shock (t-1) increases its costs, it has good prospects of its future development. So it may be noted here that the strong responsible policy is also good for the general reputation of the company and vice versa (refuse, it means discourage everybody, what is why a "new" polluting company pays more dividends). But it is a more complicated case, so in this model neutral agents consider only the history of shocks and the dynamics of dividends.

The consequences of this theoretical model will be considered for four periods: t = 0, t = 1, t = t (interim period) and t = T. Other periods will be ignored because the state of enterprises is very dynamic. The probabilities of production shocks are not known, they are random, the beginning (t = 0) all firms are identical (polluting companies and green businesses respectively), in the period T inversely all businesses have the differences, they can be easily differentiated by their reputation, by the level of production, or through the dividends, the polluting and green capital and so on. There are the best and worst companies for neutral and green agents. Let's start with the zero period:
Period t = 0:

Investors have the financial resources $FR = FR_g + FR_n$ and they buy the shares. Suppose that all firms offer the same number of shares. That is to say the company i receives $FD^i = FR / N$ and offers securities $P_x^0 * X^{i0} = FD^i$. At first there are only

polluting and green companies. After the issuance of securities the second stock market has to be to facilitate exchange of securities between investors.

Green businesses prefer responsible investors' capital, because they require only 15% of profit as dividends. Investors who do not buy stocks of green companies wait until the next period for the appearance of reformed enterprises, because they can not invest (this is a condition of aversion of polluting enterprises). Green businesses receive $P_x^0 * X^{i0} * E_g$.

And the rest of resource of green investors is ($FR_g - P_x^0 * X^{i0} * E_g$), the amount they can invest in reformed companies in the first period. The green company i bought K_g.

Production costs are $CP^{i0} = P_{Kg}^0 * K_g^{i0} = FD^i$. Profit and dividends are the following:

$$\Pi_g^{i0} = Y^{i0} - P_{Kg}^0 * K_g^{i0} = \Gamma^{i0} * f(K_g^{it}) - P_{Kg}^0 * K_g^{i0} \; ;$$

$$DIV_g^{i0} = 0,15 * \Pi_g^{i0} = 0,15 * (\Gamma^{i0} * f(K_g^{it}) - P_x^0 * X^{i0}).$$

Polluting companies can sell their shares only to neutral investors. They choose one of two possible strategies:

1. Either buy the capital K_p and stay polluting E_p in period t = 1.

2. Either buy K_p and pay S to become E_R and attract ethical agent resources.

If the polluting firm i prefer the first strategy, it receives: FR_n / E_p and purchases capital K_p. Production costs are $CP^{i0} = P_{Kp}^0 * K_p^{i0} = FR_n / E_p$. Profit and dividends are calculated:

$$\Pi_p^{i0} = Y^{i0} - P_{Kp}^0 * K_p^{i0} = \Gamma^{i0} * f(K_p^{it}) - P_{Kp}^0 * K_p^{i0} \; ;$$

$$DIV^{i0} = 0,35 * \Pi_p^{i0} = 0,35 * (\Gamma^{i0} * f(K_p^{it}) - FR_n / E_p).$$

If firm i want reforms and give the positive signal, it pays S. Production costs are $CP^{i0} = P_{Kp}^0 * K_p^{i0} + S = FR_n / E_p$. Profit and dividends are calculated:

$$\Pi_R^{i0} = Y^{i0} - P_{Kp}^0 * K_p^{i0} - S = \Gamma^{i0} * f(K_p^{it}) - P_{Kp}^0 * K_p^{i0} - S \; ;$$

$$DIV^{i0} = 0,35 * \Pi_R^{i0} = 0,35 * (\Gamma^{i0} * f(K_p^{it}) - FR_n / E_p).$$

Period 1:
In the beginning investors receive information on positive and negative shocks of companies and their strategies (pay or not the amount S). This compensation for pollution damage increases costs and partially discourages neutral shareholders. Suppose that at time zero b polluting enterprises were denied the reforms; δ polluting enterprises, η reformed enterprises and γ green businesses have suffered from negative consequences of the production shock.

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The total supply of capital at the beginning of the first period = [the rest of the financial resources of green investors] + [dividends received from polluters with a negative shock] + [dividends received from polluters with a positive shock] + [Dividends received from reformed companies with a negative shock] + [dividends received from reformed companies with a positive shock] + [dividends received from green companies with a negative shock] + [dividends received from green companies with a positive shock] = (FR_g -

$P_x^0 * X^{i0} * E_g$)+ E_p^0 *b*δ*0,35*[(1-ρ)* f(K_p^{i0})- $P_{Kp}^0 * K_p^{i0}$]+ E_p^0 *b*(1-δ)*0,35*[(1+θ)* f(K_p^{i0})- $P_{Kp}^0 * K_p^{i0}$]+ E_p^0 *(1-b)* η*[0,35*[(1-ρ)* f(K_p^{i0})- $P_{Kp}^0 * K_p^{i0}$ - S]+ E_p^0 *(1-b)*(1-η)*[0,35*[(1+θ)* f(K_p^{i0})- $P_{Kp}^0 * K_p^{i0}$ - S]+ E_g *γ*0,15*[(1-ρ)*f(K_g^{i0})- $P_{Kg}^0 * K_g^{i0}$]+ E_g *(1-γ)*0,15*[(1+θ)* f(K_g^{i0})- $P_{Kg}^0 * K_g^{i0}$].

We do not include secondary market transactions, because buying and selling securities are realized in the form of exchange, one receives the resources, but other loses them. The secondary capital market is important because it helps replace the ordinary shareholders by responsible investors. The demand for capital depends strongly on the shock.

The interim period:
After the arrival of responsible investors to the board of management of the company, they vote for the purchase of green capital, thus costs increase. But companies that have received an environmental coalition of shareholders decreases the rate of dividends and they can reinvest more in his production. Investors' strategies depend on the utility function, that is to say they look at past history, the strategies chosen and the number of shareholders ethical. If the parameter increases, the likelihood of the creation of a coalition becomes larger.

Investors have preferences. In this section we determine the factors of the utility function of investors. The functions are different for ordinary and green investors. When investors compare companies, it can use the following two factors: a factor of wealth received - the amount of dividends received from firm i and an intangible factor - the company's reputation, in other words, the past history of company, if it is good or bad. In addition the reputation reflects its values and performance in the areas of social responsibility, quality of products and services, the employment policy, financial market position, governance and management (http://bas.sagepub.com/content/47/3/272). Yet both types of investors consider the different parameters. For example, the neutral investor looks at the number of periods with positive and negative impacts of production, it helps understand the "success story" of the company. The company with the highest number of positive shocks is the most stable and it goes bankrupt with smaller probability than the other. And in addition ordinary investor receives only real benefits - dividends. During the economic crisis all dividends go down, but there are shareholders who earn over other investors. It can be applied by comparing dividend of firm i with its maximum at time t. All these conditions can be described formally:

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$$NRP^{it} = \varphi_1 * \frac{NP(\Gamma>1)^i}{NP(\Gamma<1)^i}$$, where $NP(\Gamma>1)^i$ and $NP(\Gamma<1)^i$ it means

respectively the number of periods with positive and negative shock of firm i. and NRP^{it} is the ordinary reputation of the firm i in the period t for neutral investors. The second parameter is the following:

$$d^{it} = \frac{div^{it}}{div^{\max t}}$$, where $div^{\max t}$ is the maximum of dividends in the period t.

Now we can write the utility function of investments in stocks of the neutral agent k.

$$U_n^{kt}\left(d^t, NRP^t\right) = a * \sum_{i=1}^{P} \left(d^{it}\right)^{\alpha} + b * \sum_{i=1}^{P} \left(NRP^{it}\right)^{\beta}$$, where P means the portfolio of shares purchased by the investor k.

Now we consider the ethical preferences of investors. We construct the business rating, for them in addition to the success story we examine the level of corporate responsibility in the eyes of environmental agents. It describes the parameters of the model below.

$$GRP^i = \varphi_1 * \frac{NP(\Gamma>1)^i}{NP(\Gamma<1)^i} + \varphi_2 * \frac{NP(A_g^t-A_g^{t-1}>0)^i}{NP(A_g^t-A_g^{t-1}<0)^i} + \varphi_3 * \frac{NP(S>0)^i}{NP(S=0)^i}.$$

The second factor allows analyzing the dynamics of green shareholders A_g^t in the board of the company, if their number is still increasing; this shows the stable trend of creation of strong coalition of ethical investors which can minimize environmental losses by modernization of production. To monitor and improve the policy of environment protection they vote for the replacement of K_p by K_g. We can ignore the dynamics of capital K_g in the above expression, because it directly depends on A_g^t. The third factor is related to the initiative of the company's managers, who want to reshape the company. They can pay S, even if production receives a negative shock. This underlines the great desire of the company to have environmentally responsible policy. It is a policy of signal. The opposite situation, that of denial of this policy is also quite possible.

It described the intangible factor of green reputation, now we look at the dividends received by responsible shareholders. The choice of green or reformed business brings to responsible investor the feeling of satisfaction ("happiness") that can even compensate financial losses

(e.g., reduction of dividends). Now we add the additional amount (psychological dividends) to ordinary dividends and the second parameter of the utility function takes the following form:

$$bd^{it} = \frac{div^{it} + bon^{it}}{div^{\max t} + bon^{\max t}}$$

, where $bon^{\max t}$ is the maximum level of psychological dividend in period t (this is a company with minimal environmental losses). And bon^{it} is the psychological dividends received from investment in firm i.

Now we construct the final formulation of the utility function of agent k:

$$U_g^{kt}\left(bd^t, GRP^t\right) = c * \sum_{i=1}^{P}\left(bd^{it}\right)^{\rho} + d * \sum_{i=1}^{P}\left(GRP^{it}\right)^{\phi}$$

, where P is the portfolio of shares purchased by the investor k.

The bonus can offset the losses of real dividends which explain the fact that during the crisis responsible shareholders are more resistant to the stock market panic, that is to say, to the massive sale of securities. They prefer to stay with his company and support the purchase of green capital not to push ahead for the environmental pollution.

In turn the company must compare these minimums costs with the existing resources. After purchasing the green capital the function of reformed companies obtains the following form:

$$\Pi_R^{it} = \Gamma^{it} * f(K_p^{it}, K_g^{it}) - P_{Kp}^0 * K_p^{i0} - P_{Kg}^0 * K_g^{i0} - S.$$

The choice of strategy depends on the following:
1) The past history, if there was enough negative shocks which decrease its ability to reinvest in its production costs and pay the minimum dividends. In addition adverse shocks discourage neutral agents, because they appreciate only this factor;
2) The number of other polluting companies with positive production shock. Because the company wants to be insured against bankruptcy, which becomes more real with the stronger competition for the resources of ordinary investors. The responsible policy allows to diversify and widen the choice of potential sources of investments, including those of ethical agents.

The strategy may take the following form:

Pay S if $\dfrac{E_p(\Gamma > 1)}{E} > h$ and $\dfrac{NP(\Gamma > 1)^i}{NP(\Gamma < 1)^i} < 1$, it means that the share of successful

polluting enterprises is more than the chosen parameter h and the company i do not have enough success.

The last period (t=T)
It is assumed that at the last period all possible coalitions are created. This means that this economy has the following state. Part of the reformed enterprises with coalitions produce the

minimum pollution and thanks to loyal shareholders, they may be more stable even during the crisis of production. Polluting companies, who can not reform or they have already rejected responsible policy, works only with the neutral part of investors that receive high dividends by saving on costs. The most volatile situation is in the rest of the reformed enterprises. Its shareholders include ordinary investors, who could not purchase the securities of polluting firms, and responsible green investors, whose number is not enough to create a new coalition. The latter case provides dynamic financial market in this hypothetical economy.

Suppose finally that there exists one and only one company from each reputation level. This means there is the best and worst companies for each type of investors. The best (by reputation level) reformed enterprises were able to attract the maximum resources of responsible investors, producing the minimum level of pollution and create all possible coalitions of green shareholders. The best polluting companies (with the maximum profit, because it is a main factor in the neutral reputation) are supported only by neutral investors, who have had the fortune to choose them in the conditions of uncertainty and random shocks of production. All green companies, except companies that have failed due to unfortunate history of negative shocks of production, use only the resources of green investors, because their level of dividends is very small for neutral agents.

4 CONCLUSION

The objective of this paper was to examine the influence of the presence of responsible shareholders on performance and policy of enterprise policy and the real economy. We built the theoretical model with responsible shareholders that concerns about corporate policy which allowed examining the consequences of the emergence of a coalition of green investors who have strong incentives to monitor pollution or modernize production. We present the model extended, where we introduced the factor of corporate reputation that influenced the choice of investments and the factor of production shocks that put businesses in uncertain conditions of their activity.

Regarding reputation, it should be noted that before this paper there was no theoretical framework that introduces this aspect in the process of decision making of responsible investors. In this paper we have internalized this factor which encouraged the participation of company managers in the non profitable activity to improve its image. In future work, we extend the model by introducing the public sector (government) and foreign funds of socially responsible investments. It is an open economy where the government may also become the major shareholder of companies and introduce ethical values.

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ARE REFORMS PRODUCTIVE?: EXPLAINING PRODUCTIVITY AND EFFICIENCY IN THE INDIAN MANUFACTURING[1]

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ABSTRACT

India's economic liberalization in the 1990s provides scope for research on the effect of policy reforms on economic performance. This paper addresses the question of some of these policy changes and their impact on firms' productivity and efficiency. We test specifically the role of export and, import (total, intermediary and capital goods) policy, R&D, technology transfer and infrastructure endowment over the period 1994-2008. Result of the analysis suggests that infrastructure is a crucial determinant of manufacturing performance in India. This is true for a wide range of variables such as transport, energy and information & communication technology (ICT). This result is important in the Indian context of infrastructure bottlenecks. Empirical results also suggest that knowledge transfers through exports are more important than through imports. Other findings indicate that R&D is not a productivity-enhancing activity in India and that firms rely more on purchase of foreign technology. This outcome does not come as a surprise because Indian firms are known for low in-house research and innovation-oriented activities.

Keywords: India, Manufacturing, Technical Efficiency, Total Factor Productivity

JEL Classification: L60, H54, D24, O53, O3, F43.

1 INTRODUCTION

The role of productivity in determining income levels and economic performance, as well as issues concerning accurate measurement techniques, have attracted a large number of researches in India (see Goldar, 2004). Not too many studies, however, have attempted to answer the question of the determinants of productivity and efficiency over time. To fill this gap, this paper focuses on the manufacturing industry and examines the role of some of the important factors in explaining the productive performance in this sector.

A vital element of India's rapid economic growth since the early 1990s has been the improved performance of its manufacturing industry. Manufacturing is an important sector in terms of value added and earning of foreign exchange of the Indian economy, comprising about 31 % of the non-agricultural GDP (Natarajn and Duraisamy, 2008). This sector has gained in strength in many ways over the past twenty years, as a consequence of a liberalization of industrial controls, as well as a gradual integration with the world economy. The average

output growth rate was of 8 % in the last decade and targeted at around 12 % in the eleventh plan period (2007-08 to 2011-12) (Planning Commission, 2006).

In the reform era (since 1991) in India, the manufacturing sector has witnessed major policy changes, particularly in licensing, technology transfer and trade policies. Industrial de-licensing and removal of restrictions on foreign investment have modified the profile of this sector considerably. Successive trade policies have stimulated export and import, especially of intermediary and capital goods, since tariff rates have been reduced drastically and quantitative restrictions on imports by and large abolished. To encourage firms to innovate and conduct R&D activities, the government has developed a system of fiscal incentives and financial benefits (for details, see Sharma, 2012). Thus, factor cost advantages are being replaced by technology-related factors in determining international competitiveness of the Indian firms, such as zero-defect product quality and international certification of firms' quality assurance systems (UNIDO, 2005). These reforms aimed at making the Indian industry more efficient, technologically up-to-date and competitive. However, despite these policy changes, *TFP* growth of this sector declined to less than two % in the 1990s, from above five % in the 1980s (see Trivedi et al., 2000; Goldar and Kumari, 2003). Recent estimates indicate as well a marginal improvement in *TFP* growth in the manufacturing industries in the 2000s (Seghal and Sharma, 2010; Kathuria et al., 2010). Thus, it is relevant and important for policy point of view to ask if the recent reforms have had the expected impact on the Indian industrial performance. The present paper addresses this question.

In the literature, the role of export and import in promoting growth, through productivity gains in particular, has been debated extensively (see Balassa, 1988; Bhagwati, 1988, Krugman, 1994). International trade is considered as one key sources of the transmission and adoption of new technology (see Romer, 1987; Coe and Helpman, 1995; Barro, 1997; Frankel and Romer, 1999). This channel is particularly important for developing economies where new technology is relatively scarce and firms are dependent of high quality imported intermediate goods. On the one hand, imports are generally described as increasing competition for the domestic firms, inciting them to invest and be more productive. The positive effect of import is also associated with knowledge spillover between foreign and domestic goods, as developed by Aitken et al. (1997) and Keller (2004). On the other hand, imports of intermediary and capital goods are seen as stimulating productivity through technology transfer and better quality of products imported. As for exporting firms, international competition is a factor of innovation and investment in more productive technologies and organization as well. In the case of India, Chand and Sen (2002), Goldar and Kumari (2003), Sharma (2011), Mishra and Sharma (2012) confirm that trade and productivity are closely related.

Research and innovation have also been identified as another key channel of firms' productivity and income gains. Endogenous growth models explain that R&D expenditures, in addition to directly enhance firms' productivity through innovation, contribute to this process through their industry-wide spillover effect (see Grossman and Helpman, 1990; Romer; 1986). Most of the empirical studies have invariably found a significant and positive impact of R&D on firms' performance (see Griliches, 1979, 1986; Griffith et al., 2006; O'Mahony and Vecchi, 2009). But the success of the manufacturing sector has also been linked to foreign technology transfer. In India, Raut (1995) and Sharma (2012) have shown the role (however at varying degree) of innovation in productivity performance of firms.

Another important factor which has direct implications on manufacturing performance is physical infrastructure. In the related literature, infrastructure is considered to be a crucial factor of productivity and efficiency enhancement through external economies and complementarity with other factors of production (see Romer, 1986; Lucas, 1988; Barro and Sal-i-Martin, 1995; Anwar, 1995). In India, the infrastructure inadequacies have been recognized as a major constraining factor for the performance of firms (see Pinto, Zahir and Pang, 2006). In recent years, however, the Indian government has been putting in efforts to enhance the infrastructure services by liberalizing the related policies, encouraging the private sector in infrastructure projects through public private partnership (PPP), and directly investing in the infrastructure sector. Government expenditure, in particular, has been increased from 4.6% of GDP to a figure between 7 and 8% in the eleventh plan period (2007-08 to 2011-12) (Planning Commission, 2006). However, this is still far from China effort, which has invested between 15 and 20 % of its GDP since the mid-1990s. On the empirical side, Mitra et al. (2002 and 2011), Hulten et al. (2006), Sehgal and Sharma (2010) have shown that infrastructure endowments have played a critical role in improving the performance of the Indian industrial sector.

Against this background, the present paper revisits the issue of the impact of the reforms on the manufacturing performance. We test the effect of several factors: import (total, intermediate and capital inputs), export, in-house R&D, technology transfer and physical infrastructure, which we link to the productivity and efficiency of the industries. While doing so, we introduce several novelties from the empirical standpoint. *First*, in the standard literature, the factors mentioned above are most of the time tested separately. We move a step ahead and test them in a single framework in order to compare the drivers of the industrial performance. *Second,* in most of the previous studies on India, data was mainly taken from the Annual Survey of Industry (ASI). We utilize a new manufacturing database, Prowess, which includes eight important industries and allows us to extend the time horizon of the analysis up to 2008. *Third*, while the previous studies in India sometimes focused on total factor productivity (*TFP*), we analyse the impact on another crucial indicator of industrial performance, namely the technical efficiency (*TE*). *Fourth*, the inclusion of too many infrastructure variables separately in a regression analysis may lead to multicollinearity problem. In order to avoid this, we construct two composite indices of infrastructure (*G*) for total infrastructure and (*ICT*) for information & communication technology, by using principal component analysis (*PCA*). *Fifth*, some recent researches (see Kasahara and Rodrigue, 2008; Goldberg et al. 2008) have shown that intermediate imported inputs are crucial sources of industrial productivity gain, while some others (see Ziesemer, 1995, Dovis and Milgram-Baleix, 2009) highlight that it is imported capital goods which are important for technology adoption and implementation. In the paper, we consider both the variables separately in the model.

The rest of paper is organized as follows. The second section introduces the data used in the analysis. The third section discusses some methodological aspects linked to the computation of total factor productivity (*TFP*) and technical efficiency (*TE*). The forth section estimates our empirical models and illustrates the impact of our variables of interest. The last section concludes with policy recommendations.

2   DATA ON INFRASTRUCTURE AND THE MANUFACTURING SECTOR

In this study, we have utilized data for two-digit industry groups taken from the Prowess database[2] provided by the Center for Monitoring Indian Economy (CMIE). The data set is rich and provides heterogeneity across firms and time. Annual financial statements of firms belonging to eight manufacturing industries --namely *Food & Beverages*, *Textiles*, *Chemicals*, *Non-metallic Minerals*, *Metal & Metal Products*, *Machinery*, *Transport Equipment,* and *Miscellaneous Manufacturing* -- have been used. Firm-level data have been transformed into industry-level data by aggregation. This is done for each year over the sample period, 1994-2008. We use the gross value added of the industries as the measures of nominal output, which is deflated by industry specific wholesale price indices (WPI) to obtain output in real terms[3]. The deflator is from the Office of the Economic Adviser (OEA), Ministry of Commerce & Industry, Government of India (http://eaindustry.nic.in/). The series on real capital stock is constructed using the perpetual inventory capital adjustment method as in Levinson and Petrin (2003). We take the initial capital stock equal to its net book value for the year 1994 and the rate of depreciation at 7%, consistent with similar studies for India (Unel, 2003; Ghosh, 2009).

As for labour, Prowess does not provide information on the workforce, but only on wages and salaries. To obtain this information, we used the wage rate (obtained by dividing the total emoluments by the total man days) from the Annual Survey (ASI) database. The number of workers is then approximated by dividing the Prowess information on wages and salaries by the average wage rate obtained previously. Data on other control variables such as trade (export and import) and R&D have also been extracted from the same database. All data series used in the analysis have been deflated with appropriate deflator with base 1994.

For infrastructure, this analysis considers physical infrastructure for the period 1994-2008. It covers transportation (road, rail and air), information & communication technology (*ICT*) and energy sectors. The data sources for these variables are World Development Indicators (WDI) online (2011), and Infrastructure (2009) publications of CMIE (see Table A.1 in *Appendix* 1). Instead of using all infrastructure variables separately, which is likely to lead to multicollinearity, we construct a total and an *ICT* infrastructure index for India by using Principal Component Analysis (*PCA*). For the methodology of construction of both these indices see *Appendix* 2.

3   MEASURING TOTAL FACTOR PRODUCTIVITY (*TFP*) AND TECHNICAL EFFICIENCY (*TE*)

We start our empirical analysis by computing the total factor productivity *(TFP)* of the Indian industries. For this purpose, we follow a two-stage procedure. In the first stage, we construct

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[2] Prowess Database is online database provided by the Centre for Monitoring Indian Economy (CMIE). The database covers financial data for over 23000 companies operating in India. Most of the companies covered in the database are listed on stock exchanges, and the financial data includes all those information that operating companies are required to disclose in their annual reports. The accepted disclosure norms under the Indian Companies Act, 1956, makes compulsory for companies to report all heads of income and expenditure, which account for more than 1% of their turnover.

[3] We prefer gross value added as a measure of output in computing *TFP*, as it is widely used in the Indian manufacturing sector literature (see Kumar, 2006; Goldar, 2004; Unel, 2003; Ahluwalia 1991; Balakrishnan and Pushpangadan, 1994). There are many advantages of using gross value added over output. *Firstly*, it allows us a comparison between the firms that use different raw materials. *Secondly*, if gross output is used as a measure of output, it adds the necessity of including raw materials, which may obscure the role of labor and capital in the productivity growth (Hossain and Karunaratne, 2004; Kumar, 2006).

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a panel of the eight industries and estimate a basic production function in Cobb-Douglas form:

$$Ln(Q_{it}) = \alpha_1 \ln(K_{it}) + \alpha_2 \ln(N_{it}) + \alpha_3 (T_{it}) + \eta_{it} + u_{it} \qquad (1)$$

where Q, K, and N are the value added, the capital and the labour defined previously (see section 2), for industry i and period t. T_i is the time trend specified for each industry i and α_1, α_2 and α_3 are the parameters to be estimated. The term η_t represents fixed time effects, while ln represents log of the variables. Year dummies are also included in the model.

Equation (1) is estimated using the fixed effect method[4]. Results of estimation are shown in *Appendix 3* (column 1 of the Table A.3). These results are used, in a second step, to calculate the *TFP* of the industries as follows:

$$\ln(TFP_{it}) = \ln(Q_{it}) - \widehat{\alpha_1} \ln(K_{it}) - \widehat{\alpha_2} \ln(N_{it}) \qquad (2)$$

where $\hat{\alpha}_1$ and $\hat{\alpha}_2$ are the estimated parameters of capital and labour, respectively.

To measure the technical efficiency (*TE*) of the Indian manufacturing sector, we estimated the stochastic frontier production function by maximum likelihood (*ML*) method, developed by Battese and Coelli (1992) for panel data. In this model, industry effects are assumed to be distributed as a truncated normal variable, which allows it to vary systemically with time.[5] Specifically, we employ time-varying efficiency model of the stochastic frontier as suggested by Battese and Coelli (1992). The model may be specified as:

$$Q_{it} = \alpha X_{it} + (V_{it} - \mu_{it}) \dots \dots \dots \dots \dots \dots \qquad (3)$$

where Q_{it} and X_{it} are output and inputs in log-form of i-th industry at time t.

Disturbance term is composed of two independent elements, V_{it} and μ_{it}. The former is assumed to be independently and identically distributed as $N(0, \sigma^2_v)$. The element μ_{it} is a nonnegative random variable, associated with technical inefficiency in production, assumed to be independent and identically distributed with truncation (at zero) of the distribution $N(\mu_{it}, \sigma^2_\mu)$. The parameters α s can be obtained by estimating the stochastic production function (3) using a ML technique.

Coelli (1996) utilizes the parameterization of Battese and Corra (1977) to replace σ^2_v and σ^2_μ with $\sigma^2 = \sigma^2_v + \sigma^2_\mu$ and $\gamma = \dfrac{\sigma^2_\mu}{\sigma^2_v + \sigma^2_\mu}$ in the context of ML estimation. The term γ lies between 0 and 1 and this range provides a good initial value for use in an iterative

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[4] The advantage of the *FE* estimator is that it can handle the issue of omitted variables that may be correlated with the explanatory variables. Also *FE,* to some extent, tackles the endogeneity bias, as well as the problem of non-stationarity because in the estimation for the within form, deviations from the mean are used.

[5] The original model of Battese and Coelli (1992) is for firm level data, whereas we employ the model on industry data. Our working hypothesis is that some industries operate more efficiently than others.

maximization process. Subsequently, the relative technical efficiencies (*TEs*) of each industry can be predicated from the production frontier as follows:

$$TE = \frac{Q_{it}}{\exp(f(X_{it};\alpha))} = \exp(-\mu_{it}) \dots\dots\dots\dots \quad (4)$$

Since μ_{it} is, by definition, a nonnegative random variable, *TE* is bounded between zero and unity, where unity indicates that the industry is technically the most efficient. Our model measuring the efficiency is:

$$\ln Q_{i,t} = \alpha_0 + \alpha_1 LnK_{i,t} + \alpha_2 LnN_{i,t} + \sum_t \lambda_t D_t + (v_{it} - u_{it}) \dots\dots\dots\dots\dots (5)$$

Here D_t is a dummy variable having a value of one for t^{th} time period and zero otherwise and λ_t s are parameters to be estimated. The dummy variable is introduced in the model for the technical change; this is in line with the general index approach of Baltagi and Griffin (1988). The change in λ_t between successive periods becomes a measure of rate of technical change.

$$TC_{t,t+1} = \lambda_{t+1} - \lambda_t \dots\dots \quad (6)$$

This implies that the hypothesis of no technical change is: $\lambda_t = k \,\forall t$.

Using the above model (see equation 5), we estimate the *TE* of the Indian manufacturing. Our dataset for the panel of industries is the same as that used for *TFP* calculations. A Cobb-Douglas form is as well postulated for the purpose of the production frontier. Results of estimation are presented in *Appendix* 3 (column 2 of Table A.3). These results have been used to calculate the *TE* of the industries (as in equation 4).

4   EXPLAINING INDIAN MANUFACTURING PRODUCTIVE PERFORMANCES

After having estimated the *TFP* and *TE* for the manufacturing sector, we turn to explaining the sectors' productive performances. Our empirical model is as follows:

$$X_{it} = \beta_0 + \beta_1 Export_{it} + \beta_2 \, Import_{it} + \beta_3 R\&D_{it} + \beta_4 \, tech_{it} + \beta_5 G_{it} + e_{it} \quad (7)$$

where X is the measure of *TFP* or *TE* and βs are the parameters to be estimated.

Export (*export*) and import (*import)* intensities are calculated respectively as the ratio of export and import of goods to total sales. They are expected to influence positively the firm's productivity and efficiency. A variant of this model has consisted in distinguishing the imported intermediate (*importraw*) and capital goods (*importcap*) from the total imported good. These variables are processed as the ratio of imported intermediate and capital goods to total sales and are expected to improve the industries' productive performances as well. R&D intensity (*R&D*), which is taken as a proxy for research and innovation, is calculated as the ratio of in-house R&D expenditure to total sales. It is also expected to improve the firm's performance. We also consider the intensity of technology transfer (*tech*) measured by expenditure on royalty on technology to total sales. As for R&D, this variable is expected to enhance the industries' performances. Finally, we utilize two measures of public infrastructure: a total infrastructure index (G), and an information & communication technology index (*ICT*) (see Appendix *1* and *2* for details on the infrastructure indicators and

the aggregation method). Both variables are expected to have a positive impact on industries' productivity and efficiency.

We apply the fixed effect (*FE*) model to our panel of eight manufacturing industries. Results are presented in Table 1 for the explanation of *TFP* and in Table 2 for *TE*. Column 1 of Table 1 reports the results pertaining to the impact of import (*import*), export (*export*), and R&D (*R&D*) intensity, as well as total infrastructure availability (*G*) on *TFP*. Findings suggest that infrastructure is the most important determinant of productivity, with an elasticity of 0.109 at the conventional significance level. This can be interpreted as a 1% increase in infrastructure endowments leads to 0.109% growth in *TFP*, which is substantially large. Export intensity (*export*) is also estimated to be statistically significant with a substantial impact on productivity as well (elasticity of 0.099). As for import (*import*) and R&D (*R&D*) intensity, they are not found to be statistically significant.

Column 2 of Table 1 presents the results when total imports are replaced by imports of intermediate (*importraw*) and capital (*importcap*) goods, along with expenditure on royalty for technology transfer (*tech*). Similar as before, results regarding export-intensity (*export*) and infrastructure availability (*G*) are found to be crucial determinants of *TFP* of the industries. As for royalties (*tech*), the impact, though significant, is not sizable. Results fail, as well, to recognize any effect of import intensity (*import*) on productivity, as both imported intermediate (*importraw*) and capital (*importcap*) good variables are estimated to be statistically insignificant.

Columns 3 and 4 display the results when the *ICT* index replaces the total infrastructure index. Findings regarding exports (*export*), imports (*import*), imported intermediate (*importraw*) and capital (*importcap*) goods, R&D intensity (*R&D*) and royalty for technology transfer (*tech*), are very similar to the ones estimated with the total infrastructure index. As for *ICT*, elasticity is found to be statistically significant and varying between 3 to 4 per cent, which is quite sizable.

Table 1: TFP determinants of the Indian manufacturing, 1994−2008 (Authors' estimations)

Variable	Coefficient (1)	Coefficient (2)	Coefficient (3)	Coefficient (4)
C	1.673679** (32.01509)	1.752190** (32.70074)	1.811760** (81.30494)	1.889999** (66.11011)
IMPORT	0.002244 (0.151267)		0.002828 (0.193949)	
EXPORT	0.099762** (6.911471)	0.083143** (5.954704)	0.099598** (6.963184)	0.086476** (6.284772)
R&D	0.001916 (0.305954)	-0.000674 (-0.110176)	0.001799 (0.290074)	-0.00048 (-0.007975)
INFRA-index (G)	0.109809** (4.206162)	0.082415** (3.239839)		
IMPORTRAW		0.020950 (1.561013)		0.020987 (1.591312)
IMPORTCAP		-0.010503 (-1.871463)		-0.009615 (-1.719517)
Tech		0.027090**		0.024297

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				**
		(2.427236)		(2.172017)
ICT-index (ICT)			0.041783**	0.029637**
			(4.446658)	(3.384770)
R²	0.623296	0.663626	0.629479	0.669675

Notes: t-values in parentheses. ** indicates statistical significance at 5% level.

In the next stage, the same models are tested for technical efficiency (*TE*). Findings are reported in Table 2. Results of column 1 are very similar to that on *TFP*, as for the total infrastructure index. The impact of export intensity (*export*) is however found to be much lower in that case. The analysis also suggests that import intensity (*import*) has a significant effect on the efficiency of the industries, though not very sizable (elasticity of 0.02). On the contrary, R&D intensity (*R&D*) is not found to having any role in determining *TE*.

In the next estimation, results of column 2 indicate that imported intermediate goods (*importraw)* and direct technology transfer (*tech*) variables display a significant impact on firms' efficiency, although not very sizable either (elasticity of 0.02). Estimations however fail to show a significant role of imported capital goods (*importcap*) on the efficiency. Findings regarding other variables, i.e. infrastructure availability (*G*), R&D (*R&D*) and export (*export*) intensity are very similar to the ones in column 1.

Considering the role of *ICT* in the efficiency movements, it is again found similar to that of *TFP* and it varies from 0.03 to 0.04 (see columns 3 and 4 of Table 2). As for the other variables, conclusions are the same as in column 1 and 2, when estimating the impact of total infrastructure on efficiency.

Table 2: TE determinants of the Indian manufacturing, 1994−2008 (Authors' estimations)

Variable	Coefficient (1)	Coefficient (2)	Coefficient (3)	Coefficient (4)
C	1.735706** (59.70154)	1.776961** (60.02388)	1.858225** (157.5004)	1.883326** (139.8301)
IMPORT	0.020874** (2.531729)		0.020222** (2.617551)	
EXPORT	0.041235** (5.104132)	0.036789** (4.768981)	0.040479** (5.305632)	0.036888** (4.975370)
R&D	0.003533 (1.015530)	0.001923** (0.568914)	0.003120 (0.949727)	0.001700 (0.522831)
INFRA-index (G)	0.100634** (6.928806)	0.090462** (6.436513)		
IMPORTRAW		0.021913** (2.955259)		0.021992** (3.114389)
IMPORTCAP		-0.001886 (-0.608385)		-0.000339 (-0.113113)
Tech		0.019362** (3.140027)		0.016042** (2.673233)
ICT-index (ICT)			0.040631** (8.155484)	0.036484** (7.278718)
R²		0.734463	0.731006	0.753879

Notes: t-values in parentheses. ** indicates statistical significance at 5% level.

Overall, our findings validate some of the conclusions of the earlier literature. Regarding infrastructure, in particular, it corroborates the outcomes of Mitra et al. (2002, 2012), Hulten et al. (2006), Sehgal and Sharma (2010). It suggests that, despite a major shift in infrastructure availability and manufacturing performance in India in the recent years, the linkage remains intact and infrastructure is still a major determinant of the manufacturing performance. On the other hand, the results regarding export are important because most of the previous analysis in India failed to find a significant role of this variable (Singh, 2003; Mishra and Sharma, 2011). Our findings thus recognize the hypothesis of *learning-by-exporting* in the case of Indian manufacturing. As for imports (total, intermediate and capital goods), the effects appear uncertain. Our results may suggest that knowledge transfers through exports are more important than through imports. This outcome is similar to that of Sjoholm (1999) for Indonesia. Sjoholm also concluded that imported capital and intermediate goods should be tested separately. Our efforts in that direction, however, failed to bring out any conclusive effect. One explanation can be that the share of imported intermediary and capital goods has not reached a sufficient level to materialize a higher productivity. Not surprisingly, our findings regarding R&D do not validate the impact noted in other studies for India (Raut, 1995; Sharma, 2012). This is understandable, as the Indian firms are known for low R&D intensity. The variable *tech* (technology transfer) being significant, it seems that firms are relying more on this channel than pursuing in-house research and innovation activities.

5   CONCLUSIONS AND POLICY RECOMMENDATIONS

India's economic liberalization in the 1990s provides a rich opportunity to assess the effect of policy reforms on economic performance. Given that one of the main objectives of these reforms was to improve the productivity of the manufacturing sector, the question that we have addressed in this paper is if some of these policy changes have had the expected impact on the Indian firms 'productive performance. In order to do so, we have tested the role of export and import (total, intermediary and capital goods), R&D, technology transfer and infrastructure endowment -- some of the important areas in which the government has shown keen interest during the reform period.

Actually, despite a substantial increase in trade and production following the economic reforms, the manufacturing industry has experienced quite a disappointing productive performance. This situation constitutes a puzzle that the literature has not very well explained until now. One factor suggested in some of the studies relates to the infrastructure deficiency being a serious impediment to the manufacturing performance. Our analysis confirms this view by establishing infrastructure as an important determinant of the manufacturing productivity and efficiency. This is true for a wide range of physical infrastructure, in the field of transport, energy and telecommunication. Our findings confirm as well the results of Mitra et al. (2011) on the productive role of the information & communication technology (*ICT*), which experienced an extensive development over the same period. Actually, despite the recent efforts to modernize the infrastructure sector, bottlenecks still persist as a serious problem in India.

Our empirical work suggests another explanation of the poor manufacturing performances. Trade liberalization is motivated by expected productivity gains coming from an increased competition for domestic firms, as well as knowledge spillover and technology transfer from more developed countries. These gains seem to have imperfectly materialized in the case of

India, since our empirical analysis failed to validate a significant role of total imports, as well as intermediate and capital goods imports, as factors of productivity and efficiency. One explanation of this result can be that the share of import -- intermediate and capital goods specifically -- has not reached a threshold level to materialize into productivity-gains. However, as regards exports, our empirical analysis is more conclusive. Exports exhibit a sizeable impact on firms' productive performances. It appears that the Indian manufacturing sector has benefited more from knowledge transfer through exports than through imports. Our findings thus validate not only the hypothesis of learning-by-exporting, extensively debated in the literature, but also the incitation to be more productive due to competition in the foreign market.

Another result of our empirical work concerns R&D which does not appear to be a significant determinant of productivity. This outcome, consistent with other studies, does not look surprising as Indian firms are known for low R&D activities, despite the recent efforts of the government to stimulate in-house R&D. This conclusion is supplemented by our results on technology transfer, which turns out to be significant in explaining firms 'productive performances. This finding tends to show that firms in India rely more on this channel than on pursuing in-house research and innovation, limiting their ability to be competitive in the medium-long run.

Like most other developing countries, India is increasingly concerned about improving productivity and competitiveness as the country faces the intensified pressure of globalization. As per our results, enhancing total and ICT infrastructure could help the manufacturing sector to resist international competition and reinforce the industrial export capacity of the country. Reducing infrastructure bottlenecks, by leading to a rise in productivity, would also help the manufacturing sector to diversify an grow. Low in-house R&D represents lack of innovation necessary to grow and become competitive. Our results also suggest that export liberalization constitutes another means of boosting the productivity and efficiency of the industries. This policy needs to be continued since Indian manufacturing is still not well integrated with the world economy. As for import liberalization, although our empirical work did not validate its impact on firms' productive performance, our findings call for more investigation on the subject since import intensity, of intermediate and capital good in particular, may have not reach a level at which competition, knowledge spillover and technology transfer can play a crucial role in augmenting productivity growth .

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APPENDICES

APPENDIX 1: Infrastructure Variables (Sources Of Data)

Variable	Sector	Indicator	Data sources
Air	Transportation	Air transport, passengers carried	WDI
Electricity	Electricity	Electricity production (kWh/per-capita)	WDI
Internet	Information and Communication	Internet users (per 100 people)	WDI
Mobile	Information and Communication	Mobile cellular subscriptions (per 100 people)	WDI
Tel.	Information and Communication	Telephone lines (per 100 people)	WDI
Mobile-tel.	Information and Communication	Mobile and fixed-line telephone subscribers (per 100 people)	WDI
Port	Transportation	Port (commodity wise traffic , 000 tones)	CMIE
Rail-goods	Transportation	Railways, goods transported (million ton-km)	WDI
Rail-pass	Transportation	Railways, passengers carried (million passenger-km)	WDI
Roads	Transportation	Roads, total network (km/1000people)	WDI

APPENDIX 2: Total And Ict Composite Infrastructure Indicators

The Principal Component Analysis (*PCA*) methodology is a widely used aggregation technique, designed to linearly transform a set of initial variables into a new set of uncorrelated components, which account for all of the variance in the original variables. Each component corresponds to a virtual axe on which the data are projected. The earlier component explains more of the variance of the series than do the later component. The number of components is proportional to the number of initial variables that are used in the *PCA*. Usually, only the first components are retained, because they explain most of the variance in the dataset. The cumulative R^2 gives the explanatory power of the cumulative components.

In order to construct a composite total infrastructure index for India, we apply the Principal Component Analysis (*PCA*) to our nine infrastructure indicators. The results bring out one significant component and this component explains 90 % of the variance in the underlying individual indicators (see Table A.2.1.). In the next stage, on the basis of the results of the *PCA*, the factor loadings of the initial variables are used as weights of the respective variables in constructing the composite infrastructure index (see Table A.2.2.). For more details on the aggregation method using Principal Component Analysis (*PCA*), see Nagaraj *et al.* (2000) and Mitra *et al.* (2002).

Table A.2.1: Principle component analysis: Total infrastructure indicator (G) (1994 to 2008) (Authors' calculation)

	Eigenvalue	Proportion
P1	**7.25486****	**0.9069**
P2	0.561524	0.0702
P3	0.128091	0.0160
P4	0.03333	0.0042
P5	0.009241	0.0012
P6	0.007714	0.0010
P7	0.004457	0.0006

Table A.2.2: Factor loadings: Total infrastructure indicator (G) (Eigenvectors) (Authors' calculation)

	P1
Air	0.3391
Internet	0.3454
Rail-goods	0.3587
Rail-pass	0.3688
Roads	0.3063
Electricity	0.3694
Mobile-Tele	0.3679
Port	0.3681

Using the same methodology as for the composite total infrastructure index, an *ICT* index (*ICT*) is also constructed in this study. The result of the *PCA* for this sector suggests as well the presence of one significant component, which explains 94 % of the variance in the individual *ICT* indicators (see Table A.2.3). On the basis of the factor loadings, the weights are assigned to the respective variables for constructing the *ICT* index (see Table A.2.4).

Table A.2.3: Principle component analysis: ICT infrastructure indicator (ICT) (1994 to 2008) (Authors' calculation)

	Eigenvalue	Proportion
P1	2.8351**	0.9451
P2	0.15522	0.0517
P3	0.00959	0.0032

Table A.2.4: Factor loadings: ICT infrastructure indicator (ICT) (Eigenvectors) (Authors' calculation)

	P1
Internet	0.5908
Mobile	0.5762
Tele	0.5647

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APPENDIX 3

Table A.3: Cobb- Douglas production function: Estimation results, 1994-2008
(Dependent variable: ln(GVA)) (Authors' calculation)

Variables	Eq. (1)	Eq. (2)
ln (K)	0.40264 (0.0694)	0.4244 (0.0681)
ln (N)	0.46544 (0.0642)	0.4444 (0.0632)
Trend	0.02426 (0.0019)	0.02348 (0.0019)
Const	2.2192 (0.2818)	2.61173 (0.3202)
R^2	0.6477	
Year-dummy	Yes	Yes
Estimator	Fixed	Time-invariant inefficiency model

Notes: Standard errors are in parentheses. For column (2), log likelihood: 174.54228, Wald λ^2:1296.01, $\mu: 0883 (s.e. 0.146)$. Number of observations (panel):120(8). *TFP* computed on the basis of results of column (1). *TE* computed on the basis of results of column (2).

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CITIZENS AS CONSUMERS: PROFILING E-GOVERNMENT SERVICES' USERS IN EGYPT VIA DATA MINING TECHNIQUES

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ABSTRACT

This study uses data mining techniques to examine the effect of various demographic, cognitive and psychographic factors on Egyptian citizens' use of e-government services. Multi-layer perceptron neural network (MLP), probabilistic neural network (PNN), classification and regression trees (CART), and multivariate adaptive regression splines (MARS) are compared to a standard statistical method (linear discriminant analysis (LDA). The variable sets considered are sex, age, educational level, e-government services perceived usefulness, ease of use, compatibility, subjective norms, trust, civic mindedness, and attitudes. The study shows how it is possible to identify various dimensions of e-government services usage behavior by uncovering complex patterns in the dataset, and also shows the classification abilities of data mining techniques.

1   INTRODUCTION

One of the most intractable problems for anyone dealing with government is the sheer complexity of its organizational structure. For example, it has been estimated that the average government has between 50 and 70 different departments, agencies and regulatory bodies (Silcock, 2001). A number of government's different agencies may be involved in simple matters such as registering the birth of a child. In several countries there has been a growing pressure for governments to move online. In the Arab world, Dubai pioneered e-voting in elections for half the members of the United Arab Emirates' consultative assembly (The Economist, 2008). In Bahrain the e-government authority of Bahrain (E-GA) has recently launched the Enterprise Architecture Project initiative (EAP), which is considered to be the first of its kind in the Arab world. The initiative aims at streamlining government procedures by unifying the standards and procedures among all government entities in all matters related to information communication technology (Bahrain Tribune, 2009). Finally, in Egypt e-government currently provides 85 services to citizens including government forms, public policy information and tax filing (Hamed, 2008). Two main reasons are behind governments' decision to move online. First, a more enlightened view has begun in the ranks of government to treat the citizen like a consumer where transaction satisfaction is important. Second, pressures for governments to do more with less will force governments to provide services in a more efficient way. In fact, e-government offers substantial performance gains over the traditional model of government. For example, based on the analysis of 49 empirical studies, Danziger and Andersen (2002) concluded that there were positive e-government impacts on data access and efficiency and productivity of government performance in both internal operations and external service functions. In fact it has been argued that a significant portion of the benefits created by e-government services are obtained by the government itself in terms of efficiency gains (Tung and Rieck, 2005). For example, the U.S. government generates around US\$ 3 billion on its Web site (Clark, 2003).

Profiling e-government services users is very important because the first step in planning the target marketing strategy is to segment the market and develop profiles of the resulting market segments. In fact, the usefulness of market segmentation hinges upon accurate profiling.

2 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Perceived usefulness
The perceived benefit factor is closely related to perceived usefulness in the TAM theoretical model. Raman and Leckenby (1998) used the concept of utilitarianism to explain online behavior. They found a positive link between utilitarianism and duration of visit of web ads. This construct, too, seems to be closely related to perceived usefulness identified in TAM. Rogers (1995), in his diffusion of innovation paradigm, also posits that the perceived benefit or relative advantage of innovation positively influences adoption rate. In a meta-analysis in the innovation research literature, Tornatzky and Klein (1982) concluded that relative advantage was positively related to adoption. In a similar vein, King and He (2006), in a meta-analysis of the TAM, found a strong positive link between perceived usefulness and behavioral intention ($\beta = 0.505$). It follows that

H1: perceived usefulness of e-government services positively influences users' intention to use these services.

2.2 Perceived ease of use
Perceived ease of adoption can affect adoption behavior since an innovation that is easy to use can considerably reduce the time and effort required by the user and, thus, increase the likelihood of adopting the technology. Most studies on technology acceptance showed that perceived ease of use directly influenced attitude towards use (e.g., Ahn et al., 2004; Bruner and Kumar, 2005; Chen et al., 2002). King and He (2006), in a meta-analysis of the TAM, found a strong positive link between perceived ease of use and behavioral intention ($\beta = 0.186$). In a study of technology adoption in government agencies, Gilbert, Balestrini and Littleboy (2004) found a statistically significant association between perceived ease of use and attitude, indicating the important role of the ease of use in the formation of users' attitudes. It follows that

H2: perceived ease of use of e-government services positively influences users' intention to use these services.

2.3 Compatibility
Prior studies indicated that compatibility had strong direct impact on behavioral intention in areas such as using group support systems (Van Slyke et al., 2002), adopting new methodology for software development (Hardgrave et al., 2003) and using university smart card systems (Lee and Cheng, 2003). In a recent study of e-payment adoption in China, He et al. (2006) found that only compatibility has a significant effect on respondents' intention to adopt the system. Compatibility may also influence behavioral intention through performance expectancy and effort expectancy (Schaper and Pervan, 2007). For example, Lee and Cheng (2003) showed that compatibility of telemedicine technology exerted a significant effect on perceived usefulness. It follows that

H3: perceived compatibility of e-government services positively influences users' intention to use these services.

2.4   Subjective norms

Subjective norm (also called social norm) refers to users' perception of whether other important people perceive they should engage in the behavior (Schepers and Wetzels, 2007). While TAM does not include subjective norm, the theory of reasoned action (TRA) identifies attitudes and subjective norms as the sole determinants of behavioral intention (Fishbein and Ajzen, 1975). The theory of planned behavior (TPB), an update of TRA, also included subjective norms. Venkatesh and Davis (2000) acknowledged this and updated the TAM (TAM2) by integrating subjective norms. Several studies found a positive relationship between subjective norms and behavioral intention (e.g. Yi et al., 2006; Lu et al., 2009). In a study examining culture-specific enablers and impediments to the adoption and use of the Internet in the Arab world, Loch et al. (2003) found that both social norms and the degree of technological culturation can impact the individual and organizational acceptance and use of the Internet. It follows that

H4: subjective norms positively influence users' intention to use e-government services.

2.5   Trust

Prior empirical research incorporated trust into TAM in several ways. For example Shih (2003) extended TAM by adding the perceived Web security construct and found that high perceived Web security directly increases consumer attitudes towards e-shopping. Results also support trust as an antecedent of usefulness (Pavlou, 2003), ease of use (Pavlou, 2003), attitude (Chen and Tan, 2004), and behavioral intention (Pavlou, 2003). Few studies explored the role of trust in e-government adoption. For example, Kim et al. (2008), found that trust in the organization using the technology and trust in government as responsible for the introduction of electronic services are important determinants of e-government services adoption. It follows that

H5: trust in e-government systems positively influence users' intention to use e-government services.

2.6   Civic mindedness

The concept of civic mindedness is central to any analysis of e-government services adoption (Dermody and Hanmer-Lloyd, 2004). Civic mindedness encompasses three aspects: social contact, prior interest in government, and media use for public affairs (Dimitrova and Chen, 2006). As cyberdemocracy represents an extension of democracy into the realm of information technology and electronic communication, it is expected that the use of electronic means by citizens to interact with government to be an extension of their civic and political involvement via traditional channels (Katchanovski and La Porte, 2005). Prior research on e-government suggests that e-government users are similar to those who use government traditional services and are more engaged in civic affairs (Dimitrova and Chen, 2006). It follows that

H6: civic mindedness positively influences users' intention to use e-government services.

2.7   Attitudes

The social psychology literature on behavioral research has established attitudes as important predictors of behavior, behavioral intention, and explanatory factors of variants in individual behavior (Kotchen and Reiling, 2000). Attitude is defined as an individual's overall

evaluation of performing a behavior (Lu et al., 2009). Prior e-services research has established a positive link between attitudes and behavioral intention (e.g., Aggelidis and Chatzoglou, 2009; Agarwal et al., 2000). It follows that

H7: attitude towards e-government services positively influences users' intention to use e-government services.

3 METHOD

3.1 Sample
The empirical study involved the administration of self-completion questionnaire to citizens in three Egyptian cities. Data were collected using the drop-off, pick-up method (Craig and Douglas, 1999). The effective sample size, thus, was 776 with a response rate of 52%.

3.2 Measures
All questionnaire items, originally published in English, were translated into Arabic using the back translation technique (Brislin, 1986).

4 RESULTS
To compare e-government services users and non-users the traditional LDA was used using the SPSS 16.0 package. In order to assess the overall fit of the discriminant function classification results were examined. In combination, the discriminant function achieved 94.3% classification accuracy.

Given its usefulness in data mining (Smith and Gupta, 2000), MLP is a logical choice for the problem studied here. Following Lim and Kirikoshi (2005), a quasi-Newton algorithm with weight updates occurring after each epoch was used for MLP training. The learning rate was set at 0.1. After 100 iterations the correct classification rate (CCR) reached 99.8% as seen in Figure 1. As can be observed, the MLP classifier predicted training sample with 99.8% accuracy and validation sample with 98.3% accuracy.
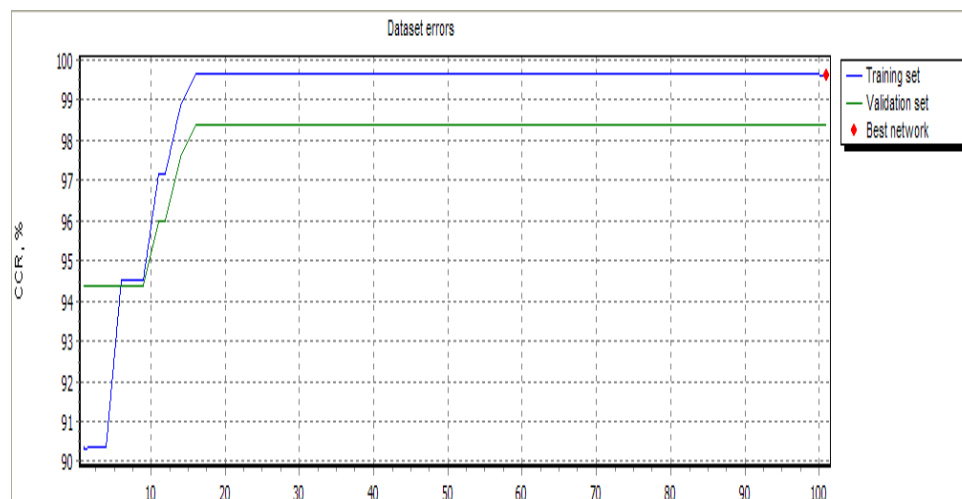
Figure 1: Correct classification rate (CCR) for the MLP neural network

The PNN classifier predicted both training and testing samples with 100% accuracy.

CART is a nonparametric technique developed by Breiman et al. (1984) to classify group observations based on a set of characteristics into distinct groups, using the decision tree methodology. The technique was introduced to overcome the inherent limitations in the automatic interaction detector (AID) and the chi-square automatic interaction detector (CHAID) techniques. Unlike AID or CHAID, CART can work in classification tree mode withy categorical predictor variables, or in regression tree mode with interval or ratio scaled predictors. CART recursively splits a dataset into non-overlapping subgroups based on the independent variables until splitting is no longer possible (Baker and Song, 2008).

Following D'Alisa et al. (2006), the 10-fold validation approach with re-substitution was adopted. This consists of simulating 10 different samples by subtracting randomly each time 10% of the subjects and duplicating randomly another 10%. After each run, the original sample is restored. The final tree represents the best trade-off between variance explanation and variance stability across 10 "different" samples. Overall correct classification rate obtained from CART was 99.48%. Figure 2 depicts the final obtained pruned CART tree. From this figure we see that trust in e-government systems plays the most important role in rule induction.

MARS is a relatively novel data mining technique developed by Friedman (1991). This technique combines classical linear regression, mathematical construction of splines and binary recursive partitioning to produce a local model where the relationship between response and predictors are either linear or nonlinear through approximating the underlying function through a set of adaptive piecewise linear regression termed basis functions (BF) (Jesus and Angel, 2004). The power of MARS for building prediction and classification models has been demonstrated in many applications such as information technology productivity studies (Ko and Osei-Bryson, 2006), and genetics (York and Eaves, 2001). In this study we used MARS 2.0 package (Steinberg et al., 1999) to conduct the analysis. Overall correct classification rate obtained from MARS was 99.10% (sensitivity = 0.931 and specificity = 0.997).

5 HYPOTHESES TESTING

Group means for user and non-user groups on each of the independent variables used in the LDA were first calculated. Given the unequal group sizes of user versus non-user groups, group specific covariance matrices were used. Review of the significance levels of the individual attributes revealed that all the attributes except demographic variables displayed significant differences between the group means. Our results confirm previous studies which found e-government usage behavior to be correlated with perceived usefulness, ease of use, compatibility, trust, subjective norms and favorable attitudes to use the system (e.g. Helbig et al., 2009). For example Gilbert et al. (2004) found that trust is one of the strongest predictors of willingness to use e-government services.

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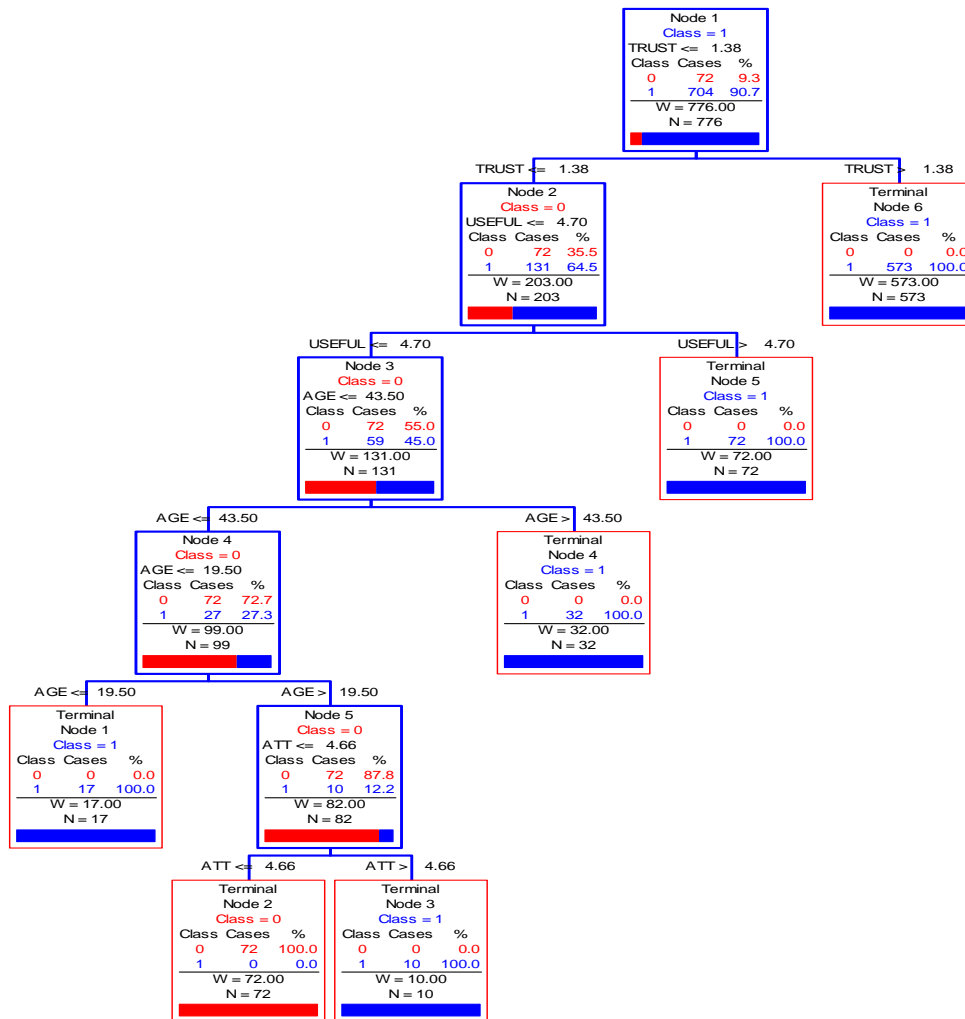
Figure 2: CART decision tree of e-government services' users

The finding that subjective norm is significant in predicting e-government services usage is consistent with Hofstede's (1991) cultural dimensions. In a high power distance collectivist culture such as Egypt one would expect significant others' opinions to have more impact on the individual because of face saving and group conformity, also a higher power distance would invoke a more influential role of peers.

It should be noted that we tested the research hypotheses using LDA as data mining techniques are of limited ability to statistically test and interpret hypotheses concerning the roles of specific variables that are included in the models as predictors. However, this limitation "should not be a serious drawback if one simply desires classification from the model" (Swicegood and Clark, 2001, p. 176).

6 IMPLICATIONS

The results of this study have several important implications for both theory and practice. From a theoretical perspective, the superior performance of data mining techniques found in this study confirms the theoretical work by Hecht-Nielson (1989) who has shown that machine learning techniques, such as neural network models, can learn input-output relationships to the point of making perfect forecasts with the data on which the model is

trained. However, perfect forecasts with the training data do not guarantee optimal forecasts with the testing data due to differences in the two data sets. Our results also corroborate the findings of other researchers who have investigated the performance of machine learning techniques compared to other traditional statistical techniques, such as regression analysis, discriminant analysis, and logistic regression. For example, in a study of clinical diagnosis of cancers, Shan et al. (2002) found a hit ratio of 85% for the PNN model compared to 80% for the LDA model. In a study of credit-scoring models used in commercial and consumer lending decisions. Trust was found to be one of the most important factors in determining e-government services usage. Because governmental agencies may be required by law to share information with other agencies, the need for trust in the maintenance of accurate citizen information will increase. Thus, a strategic aim could be to develop a trustworthy relationship with the public, giving assurances that their data will be secure, and that the information contained on the Web would be both current and accurate. This can be done through tools and techniques that Web developers can use to increase and promote the security of e-government Web sites, such as firewalls and encryption technology. Therefore, e-government services need to be user-friendly, and citizens need to have confidence in the system. In this process, the government need to be careful to protect its brand and credibility.

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URBAN FORM AND SUSTAINABLE DEVELOPMENT: THE CASE STUDY OF TEHRAN CITY

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ABSTRACT
The sprawl phenomenon has caused unsustainable urban development and economical, social and environmental problems. The purpose of this research is to analyze the urban model of Tehran city to achieve a sustainable form. Region 21 of Tehran city is considered for the analysis as one of the most critical regions subject to urban sprawl. A new approach is proposed to achieve urban sustainability and to prevent the urban sprawl phenomenon. The study is applied and the survey method is descriptive– analytic. Shanon entropy, Holdren, Moran and Geary's coefficients were used to analyze the urban growth pattern. Based on the results of the Holdren model, the portions of the population growth and the horizontal and urban sprawl in urban growth were 59% and 41%, respectively. The Shanon entropy value was 1.3738 in 1989 and the maximum value was 1.3862. This was 1.3231 in 2007 that indicates the physical development was sprawl and uncondensed during the past 20 years. The results indicate that decentralized compactness with emphasis on urban smart growth strategies is the best pattern for spatial-anatomical development of Tehran in future.

Keywords: Case study, Holdren model, Planning, Sprawl, Sustainable development, Tehran

1 INTRODUCTION

After the industrial revolution, cities have been attracted large percentage of the population of the world. For the first time in history, the urban population has been equaled the rural population. During the period of 1990 to 2030, the population of urban areas will equal to 3.3 billion of which 90% will be resided in urban areas of developing countries (Flood, 1997). Actually the average urban population growth will be faster in developing countries. During the past 50 years from 1975 to 2025, this ratio will be 3.21 for developing countries and 0.71 for developed countries. The increasing development of urban society, affected by population growth and migration, eventuates the construction without planning and non-harness expansion of cities (Barton et al., 2003). In Iran, many activities took place for physical changes in cities after the reign of Reza Shah Pahlavi (Mashhadi Zadeh, 1999). As the first action, Pahlavi's government decided to change the city structure with the belief that the anatomical changes will cause fundamental and content changes and will provide the required pattern from spatial- anatomical changes of 19th century (industrial city). Therefore, in this period, for the first time in urbanism and urbanization of the country, the government decided to change the face and organization of the city not on the basis of inner evolution and thought but on the basis of external thoughts and changes (Zebardast and Habibi, 2009). After 1960, the population of the cities grew very rapidly due to high natural growth and migration of villagers to the cities. Growth of the cities anatomy and construction was not based on the need, but on the speculation and land trade. It caused chaos of the urban land market and

negative demand of urban sprawl and made a wide range of the urban areas unusable (Athari, 2000). In recent years, similar to other major cities of the country, Tehran has grown rapidly and unbridledly due to natural population growth, immigrations, and expansion of services. Having a political identity as the capital, giving land by various government agencies, construction programs in country, social-economical and political changes and conducive environmental conditions have resulted in notable population and anatomical changes of Tehran. Consequently, its population grew from 2 million to 8 million between years of 1952 to 2011.

The area of Tehran has been a nearly five-fold increase during twenty years and now it is over 700 km^2. Rapid urbanization development and existence of enough lands and lack of directional strategy caused urban sprawl. Nowadays, the consequences of this development are lack of lands, chaos of city appearance, traffic congestion, conversion of agricultural lands to residential and industrial spaces, imponderable construction, and destruction of urban facilities and natural features in Tehran and its countryside. The main purpose of this study is to analyze the urban sprawl in region 21 of Tehran, as major sample for the sprawl phenomenon. In order to analyze the urban growth pattern, Shanon entropy, Holdren, Moran and Geary models were considered. Finally, a new approach is presented to achieve urban sustainability and to prevent the urban sprawl phenomenon.

2 LITERATURE REVIEW

The word sprawl has been used to explain the urban environment since the mid 20th century when expansion of urban areas flourished in USA due to uncontrolled use of personal automobile and expansion of highway system (Hess, 2001). The word sprawl refers to the insatiable use of land, continuous monotonous development, leapfrog discontinuous development and inefficient use of land (Peiser, 2001). This phenomenon is caused by population growth, abundance of land, decentralization of occupation, priorities of housing, destruction of the city center, development of transportation, and public policies of governments (Saeedi Rezvani and Khastoo, 2007). Urban horizontal development causes: excessive consumption of energy, reduction of regional open space, much spread of city toward out of the city, node development of city, increasing of intra-urban trips, overusing of private vehicles, high tax differences between different places, destruction of agricultural lands, ecological pollution of lakes and gulfs (Miller and Hoel, 2002). Some major studies in the field of urban sprawl are as follows:
Ewing (1997) extensively reviewed the literature on characteristics, causes and costs of alternative development pattern. Ewing et al. (2002) presented sprawl measures for 83 of the largest metropolitan areas in the United States. They examined the relationships between urban sprawl and transportation-related measures, including vehicle miles traveled, traffic fatalities, the extent of walking and public transit use, roadway congestion and air quality. Bruckner and Kim (2003) investigated possible source of urban sprawl arising from the institutions of local public finance. In particular, Bruckner and Kim (2003) explored the connection between urban spatial expansion and the property tax. Galester et al. (2004) studied sprawl in eight aspects: density, continuity, concentration, clustering, centrality, dependence on the center, combination of using and adjacency.

In survey of horizontal urban development in Iran, Taghvayee and Sarayee (2004) concluded that excessive supply and incorrect beneficiary of land caused a large area with the most appropriate facilities to be unused and inactive in Yazd city. While urban area is increasing permanently, ancient and historical buildings are evacuated. Taghvayee and Sarayee (2004)

showed that half of the area of Yazd city is useless and the city has no need for increasing in extent for the next 25 years. In analysis of sprawl of city of Zanjan, Zebardast and Habibi (2009) concluded that this city has been rapidly developed in recent years. They identified four factors of density, combination of using, centralism and access as expressive factors of sprawl. The central areas of city have the lowest rate of sprawl and the more distance from city center causes more sprawl. Recently, Mobaraki et al. (2012) identified the urban model of Urmia City to achieve a sustainable form. It was found that the model of urban growth of Urmia City is sprawl.

3   RESEARCH METHODOLOGY

The research is applied and the survey method is descriptive–analytic. Quantitative models of urban planning have been used in recognition of urban growth pattern. Needed data and information have been collected by library studies, field research, comprehensive plans, and different organizations. The data was analyzed by MATLAB and Excel.

4   CASE STUDY: REGION 21 OF TEHRAN

The region 21 of Tehran with a population greater than 200000 is spread in top end of western Tehran along Tehran-Karaj communication road. It is limited to Tehran-Karaj highway from north, old road of Tehran-Karaj from south, Kan stream and north- south along the highway and Karaj old road from east and west, respectively. Region 21 is adjacent to region 22 from north, regions 5 and 9 and 18 from east, Karaj City from west and south of Tehran green belt and Shahriar city from south. It covers a triangular measuring 51.56 km^2 in area that is 8.7% of the total area of Tehran and it is one of the largest regions of Tehran. Region 21 was a part of region 9 that was isolated from it in 2004 and now it consists of three districts. Border of district 1 and 2 is Azadegan highway and the border of district 2 and 3 is Iran Khodro Street. Northern and southern borders of all three districts are Karaj highway and old road. The areas of district 1, 2 and 3 are15.749 km^2, 17.458 km^2 and 18.61 km^2, respectively. These are divided into three equal parts roughly. Figure 1 shows the map of region 21 in Tehran with separated districts.
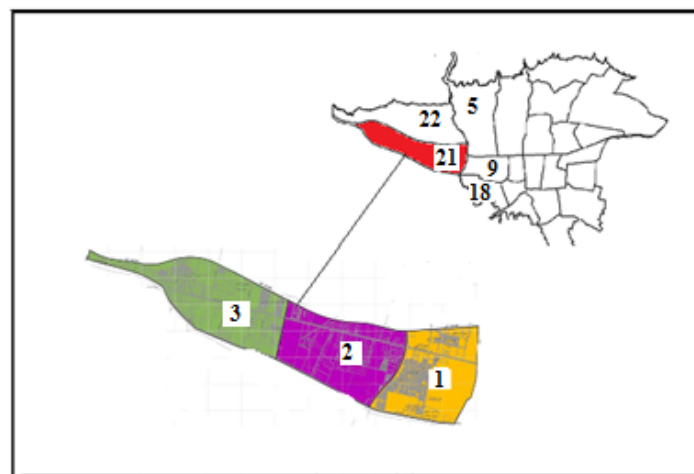
Figure 1: Map of region 21 in Tehran with separated districts

In the present situation, residential zone, commercial-service zone, production- workshop zone, protected zone, military zone and barren zone within the area are identified. The ratios of production- workshop zone area, military zone area, residential zone area, protected zone

area, commercial-service zone area, barren zone area and the other cases are 39.4%, 22%, 16.5%, 9.6%, 0.9%, 2.2% and 9.3%, respectively (See Figure 2).
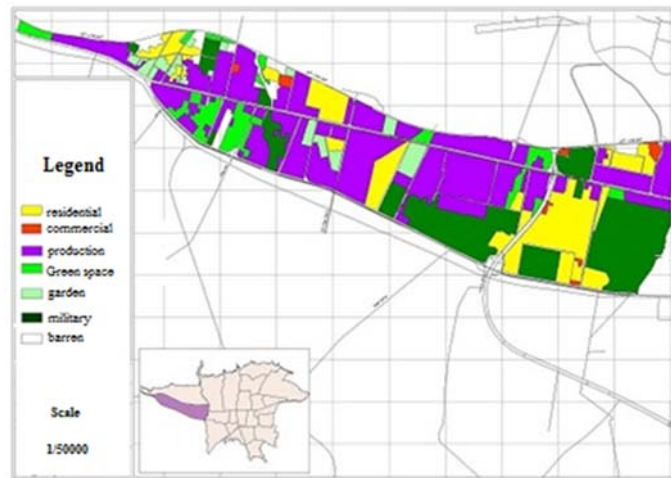
Figure 2: Zoning map of land using in region 21

5   RESULTS AND DISCUSSION

5.1   Identification of urban growth pattern of region 21 of Tehran with quantitative models

Recently, quantitative methods have been considered essential tools for systematic classification and analysis of patterns of urban growth. Therefore, different methods and models have been proposed by researchers in this field. In this study quantitative models have been used to determine the pattern of urban growth in Tehran and its region 21.

5.1.1   Shanons Entropy Model

This model is used to analyze and identify the amount of urban sprawl. The structure of the model is as below:

$$H= -\sum_{i=1}^{n} Pi \times Ln(Pi) \tag{1}$$

where H is the amount of Shanons Entropy, pi is the ratio of built-up area of zone i to sum of built-up areas for all zones and n is total number of zones. The value of Shanons Entropy is between 0 and Ln(n.) If the distribution is very compact then the entropy value would be closer to 0 and when the distribution is very dispersed the value will be closer to Ln(n). Large value of entropy indicates the occurrence of urban sprawl (Hekmatnia and Moosavi, 2006). Table 1 presents the calculation of Shanons Entropy for region 21 of Tehran.

Table 1: Calculation of Shanons Entropy in region 21

Zone	Built-up area(Hectare)	Pi	Ln(Pi)	Pi×Ln(Pi)
1	1504.04	0.3067	-1.1818	-0.36248
2	1694.87	0.3457	-1.0621	-0.3672
3	1703.46	0.3474	-1.0572	-0.3673
Total	4902.37	1	-3.3013	-1.0969

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As shown in Table 1, the value of entropy is 1.0969 and Ln(3)=1.09861. The value close to Ln(3) indicates the occurrence of urban sprawl in region 21.

5.1.2 Gini coefficient

The Gini coefficient measures the inequality among values of a frequency distribution and occupation in different areas of a metropole. This coefficient can theoretically range from 0 to 1. Low Gini coefficient indicates a more equal distribution, with 0 corresponding to complete equality, while higher Gini coefficients indicate more unequal distribution, with 1 corresponding to complete inequality. The Gini coefficient is calculated as below:

$$Gini = 0.5 \sum_{i=1}^{N} |x_i - y_i| \tag{2}$$

where N is the number of regions, xi is the ratio of area of zone i to sum of areas for all zones and yi is the ratio of population or occupation of zone i to sum of areas for all zones. Table 2 shows that population, occupation and areas of zones of region 21 of Tehran.

Table 2: Population, occupation and areas of zones of 21 region

Zones	Area	Occupation	Population
1	15749	22493	105875
2	17458	3828	18995
3	18610	6283	26995

For population:
Gini = 0.5∑(0.3-0.7)+(0.34-0.13)+(0.36-0.18)=(0.4)+(0.21)+(0.18)=0.5×0.79=40
For occupation:
Gini = 0.5∑(0.3-0.69)+(0.34-0.12)+(0.36-0.19)=(0.39)+(0.22)+(0.17)=0.5×0.78=39
According to the results, the population and occupation distribution is unequal.

5.1.3 Holdren Model

It is one of the main methods for identifying unequal urban development. John Holdern in 1991 used a method for identifying the ratio of sprawl urban growth and population growth. This model shows that how much of the urban growth is caused by population growth and how much is caused by unequal urban development. It is formulized as below:

$$a = \frac{A}{P} \tag{3}$$

where a is per capita gross, A is area and P is population. And

$$A = P \times a \tag{4}$$

If in Δt time period the population increasing is ΔP, total urban lands increasing is ΔA:

$$A + \Delta A = (P + \Delta P) \times (a \times \Delta a) \tag{5}$$

The area's change of lands ($\Delta A / A$) that has been converted to city in Δt time period is calculated as below:

$$\frac{\Delta A}{A} = \left(\frac{\Delta P}{P} + \frac{\Delta a}{a}\right) + \left(\frac{\Delta P}{P} \times \frac{\Delta a}{a}\right) \tag{6}$$

Hence, the percentage of city area growth is equal to sum of population growth and GDP per capita growth percentage. Therefore, the land growth share is obtained as below:

$$Land\ Growth\ Share = \frac{Total\ percentage\ of\ population\ growth}{Total\ percentage\ of\ land\ area\ growt} \tag{7}$$

$$Land\ Growth\ Share = \frac{Total\ percentage\ of\ land\ using\ per\ capita\ growth}{Total\ percentage\ of\ land\ area\ growt} \tag{8}$$

Holdren presented a general model of growth for completion of his model based on the population growth model:

$$P_{(T)} = P_0 \left(1 + g_p\right)^t \tag{9}$$

where $P_{(t)}$ is population in time t, P_0 is initial population and g_p is amount of population growth in specified time period. g_p is obtained from the following formula:

$$Ln\left(1 + g_p\right) = \frac{1}{t} Ln\left(\frac{P_{(T)}}{P_0}\right) \tag{10}$$

Since Ln(1+x)= x for little values of x:

$$g_p = \frac{1}{t} Ln\left(\frac{P_{(T)}}{P_0}\right) \tag{11}$$

Also, the amount of land area growth (A) and land using per capita growth (a) are obtained as below:

$$g_A = \frac{1}{t} Ln\left(\frac{A_{(T)}}{AP_0}\right) \tag{12}$$

$$g_a = \frac{1}{t} Ln\left(\frac{a_{(T)}}{a_0}\right) \tag{13}$$

Consequently, based on the population growth rate, the Holdren model is:

$$g_p = g_a = g_A \tag{14}$$

with combination of the above three equations, we have:

$$Ln\left(\frac{End\ period\ population}{Beginnig\ period\ population}\right) + Ln\left(\frac{End\ period\ capital\ gross}{Beginnig\ period\ capital\ gross}\right) = Ln\left(\frac{End\ period\ urban\ area}{Beginnig\ period\ urban\ area}\right) \tag{15}$$

Therefore,

$$Ln\left(\frac{157939}{188890}\right) + Ln\left(\frac{362.51}{278.14}\right) = Ln(\frac{7992}{3128})$$
(-0.178) + (0.2649) = 0.9380
-0.178 + 0.2649 = 0.0869
$$Ln\left(\frac{(-0.178)}{0.0869}\right) + Ln\left(\frac{0.2649}{0.0869}\right) = Ln(\frac{7992}{0.0869})$$
-2.0483 + 3.048 = 1

Thus, -2.0483% of physical growth of region 21 between 1988 and 2008 was caused by population and 3.048% of urban development was portion of urban sprawl. Actually the growth of region 21 was urban sprawl completely.

5.1.4 Degree of aggregation model

This model determines concentration degree of population and occupation or compression ratio and distribution based on spatial structure. Moran and Geary coefficients are used to measure the degree of aggregation. The Moran coefficient is defined as below:

$$Moran = \frac{N \sum_{i=1}^{N} \sum_{i=1}^{N} w_{ij}(x_i - x)(x_i - x)}{\sum_{i=1}^{N}\left[\sum_{j=1}^{N} w_{ij}(x_i - x)^2\right]} \qquad (16)$$

where N is number of zoness, x_i and x_j are population or occupation in zones i and j, x is mean of population or occupation and w_{ij} is weight between i and j. Moran coefficient is between -1 and 1. In the calculation of weighted value between two zones that have a direct relationship or common weight, weight coefficient is considered 0 (zero). The Moran coefficient has a range between -1 and +1. A value of +1 indicates totally monopole model, 0 shows random or multi polar aggregation model and -1 shows the checker model of development. The higher the value of this coefficient, the higher the aggregation while the lower the value of this coefficient the lower the aggregation (higher sprawl) (Cliff and Ord, 1981).

The Geary Coefficient is like the Moran coefficient. However, instead of giving emphasis to the mean deviation, it evaluates the difference of each zone in the relationship with another zone. The coefficient is as follows:

$$Geary \frac{(N-1)\left[\sum_{i=1}^{N} \sum_{j=1}^{N} wij(xi-x)2\right]}{2(\sum_{i=1}^{N} \sum_{j=1}^{N} wij) \sum_{i=1}^{N}(xi-x)2} \qquad (17)$$

Where N is the number of zones, Xi zone j's population or occupation, X average population or occupation and Wij the weight between zones i and j. Geary coefficient is between 0 and 2. The lower value indicates more concentration and higher value indicates more urban sprawl.

There are two techniques to calculate Moran coefficient. In first technique the weighting is based on common borders so that the weight of two zones with common border is 1 and the weight of two borders without common border is 0. Second technique is based on measurement of common border. The measured value is compared with total common border to calculate the weights of different zones. Gray coefficient is another method for measuring the concentration and distribution amount. In the Geary Coefficient calculation procedure,

both weighting techniques are used and also an adjacent coefficient is used for scale equality with Moran coefficient. Table 2 presents the Moran and Gray coefficients of the population and occupation of Tehran region 21. The calculated Moran and Gray coefficients indicate the urban sprawl in region 21 of Tehran.

Table 3: The Moran and Gray coefficients for the population and occupation of Tehran region 21

Coefficients	Occupation	Population
Moran	-0.18	-0.47
Gray	1.32	1.53

5.2   The proposed optimal pattern of urban sustainability

The following patterns have been used for urban sustainable development. The first pattern is formed under the influence of modernism in Eastern Asia. This method takes into consideration tall buildings, using of high compactness, short paths to work, easy access to services and extensive use of public transportation in the city. Despite the economical-social sustainability due to air pollution growth and cultural differences between adjacent residents, this method has been limitedly used in the world. The second pattern is decentralized compactness in urban construction that achieved public acceptance in the world. In this pattern, a single center city turns into a multi centers city based on compactness and increase in selected sub centers activities. The third pattern, the most important method of compression in the recent eras, is Transit-oriented development (TOD); a mixed-use residential or commercial area designed to maximize access to public transport, and often integrates features to encourage transit ridership. A TOD neighborhood typically has a center with a transit station or stop, surrounded by relatively high-density development with progressively lower-density development spreading outward from the center. Forth pattern is the reconstruction of city for compactness of empty spaces. Compactness process is performed for revival of historical centers and unused lands. Fifth pattern is land sharing approach that is used for organizing of marginalized area and decayed urban fabrics. In this method, the occupied housing and lands assigned to government or private companies to perform high density residential plans and after reconstruction some parts of areas allocated to communication and services networks and the rest areas allocated to previous resident as compact residential and finally costs and benefits of the investment will be financed. For region 21 of Tehran, the decentralized compactness pattern whit emphasis on smart urban growth strategies is the best pattern for anatomical- spatial development of city in future.

6   SUMMARY AND CONCLUSIONS

In the present study, a comprehensive investigation is conducted on urban sprawl phenomenon and its reasons. For the analysis, region 21 of Tehran city is considered, as one of the most critical regions subject to urban sprawl. The calculated Gini and entropy coefficients indicate that there are inequality and imbalance in distribution of population in the investigated region. The Moran and Gray coefficients indicate that physical development urban pattern has low aggregation and concentration and it is sprawl and somewhat random. Although compactness is increased in recent years but still there is sprawl in region 21 of Tehran. The result of different models of development pattern of region 21 is as follow: the entropy value is equal to 1.0969 that is close to $Ln(3) = 1.09861$ and indicates the existence of urban sprawl in region 21 of Tehran. The Gini coefficients for population and occupation are 40% and 30%, respectively. These amounts indicate the unbalanced distribution of population

and occupation in region 21. Moran coefficient is -0.47 for population and -0.18 for occupation and Geary coefficient for population and occupation is 1.53 and 1.32, respectively. These coefficients indicate dispersion in population and occupation. The Holdren model value indicates the occurrence of urban sprawl in 20 years period between 1986 and 2006. Survey of the explained models shows that urban development pattern of region 21 of Tehran is dispersed. Important reasons of sprawl occurrence are as follows: allocation of a large area of region to non-residential zones, low compactness of residential zones (less than one-third of this region is residential). Due to negative consequences of urban sprawl such as destruction of farmlands around the city, contamination of soil and water resources, air pollution, increase of the costs of urban services, length and time of traffic increasing, growth of fossil fuels consumption, social separation, and unsustainable land use, urban sustainable development and compactness of region 21 is more needed.

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RISK MINIMIZATION IN HIGHER EDUCATION UNDER THE REQUIREMENTS OF QUALITY IMPROVEMENT

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ABSTRACT
The article examines the risks and threats in the system of higher education, alsofactors contributing to risk reduction are presented.

Keywords: Higher education, Innovation, Motivation, Risk

1 INTRODUCTION

In a market economy, every organization, from its activities, must constantly study and predict a change in the internal and external environment. And to evaluate the opportunities and threats coming from the outside, to identify strengths and weaknesses, refine core competencies and capabilities of the organization. Thus, the most important factor for economic growth and competitiveness is the development and implementation of effective innovation process of organizational and commercial character. It is necessary to consider the risks that are inherent part of market activity. Consequently, risk analysis and identification of methods to minimize them is one of the pressing problems of today.

Analysis of the current literature on the theory and practice of management, shows the relationship between different types of risk, which refers to "situational characteristics of the activity meaning uncertainty of its outcome, its possible adverse consequences, alternative options for error or success" (Praisner, 2009, p. 303). Note that changing one type of risk may change the others.

Following types of risks are known that are different to each other: political, economic, external, internal, operational, etc. It should be noted that the "most dangerous and unpredictable force on the effects" are operational risks, which "result from inadequate or failed internal processes, people's actions and systems or from external events" (Volkogonova and Zoob, 2007, p. 254).

Operational risk include: personnel risk, process risk, systems risk, the risks of the external environment.

Risk that can be eliminated by diversification is called diversified risk. Non-diversifiable risk arises from external events that affect the overall market. For example, during inflation or

recession the interests of all organizations are affected, so that risk cannot be eliminated by diversification.

Diversification is the penetration of organizations into other industries (Praisner, 2009, p. 303). Diversification strategy is used to ensure that the organization does not become dependent on one activity. At present, many organizations are considering diversification as the most appropriate way to reduce the risk.

2 CHAPTER

2.1 Operational risk in the education system

Today the education system operates on market principles, and the transition to a market economy has fundamentally changed the principles of organization and management in higher education. Higher Education in the Republic of Kazakhstan (RK) is characterized by diversification; higher education institutions have become full actors of the market economy and independently determine the main directions of development. Such trends as globalization, modernization of the education system, high competitiveness in the education market to develop and encourage universities to innovate or to retain their position in the market, or to develop a new segment and additional competitive advantage. The ability of universities to respond and cope with the changes external environment has become one of the most important components of successful functioning of the educational market.

According to the definition a system of measurements for the development, implementation, deployment, diffusion and commercialization of innovations, is called innovative activity (Volkov, 2012, p. 156). That is, innovation is the creation and use of new knowledge, allowing universities to identify and remove barriers that have developed between Kazakhstani higher education and international education area.

However, in practice the biggest challenge of transformation of the university is not the creation of the correct concept, not the development of core innovation processes, and not even as senior management. A key goal is readiness of teachers to innovate. Since it is the instructor, whose motivation, ability to solve problems depends on how easily he can adapt to the changing business environment. Therefore, the willingness of instructors to implement innovation is the risk of staff and now becomes an important issue.

2.2 Motivation of teachers to innovate higher education institution

In higher education institutions an effective system of motivation of teachers to innovate must be developed and implemented. As well as create the conditions that:
- promote the involvement of instructors in the creative process of university innovation;
- increase the personal interest of instructors in self-realization and responsibility for the quality of training;
- estimate contribution to the strategic goals and objectives of the university.

Despite the high degree of elaboration of motivation problems, heads of universities are experiencing some difficulties in using the results of research in the problem-solving process to develop a system of motivation of instructors to innovate. These difficulties are connected with the lack of research focused on the development of motivational issues of teachers to innovate. Hence, having a diversified strategy, university leaders will be able to encourage the instructors to operate effectively in accordance with development issues. And to ensure the

competitiveness of the university in the education market. Typically, the main reason of diversification is the desire to reduce the risk.

Indicators of readiness to implement innovations are as following:
  – the interest in innovation and its dynamics;
  – desire to evaluate their personal and professional experience with the products of innovation;
  – a positive attitude towards the prospects of innovation;
  – awareness of their capacity, the need to self-realization;
  – awareness of instructor's insufficiency in progress and the desire to improve it.

Based on analysis of specificity of instructors' activity we can identify the following key points that affect their motivation.
  – The instructors must be clear about the nature of the job that they have to do, not only results that need to be obtained.
  – The responsibility for performance rests largely on the instructors themselves. Each of them should control themselves in obtaining new results.
  – Continuous innovation must become an integral part of the task of the instructor. He must be responsible for creating inventions, and for participation in their use.
  – Activities of such instructors necessarily involves, on the one hand, the constant self-education and self-improvement, and on the other - teaching others.

However, analysis of current educational research, scientific and methodological literature shows that changes in the external and internal environment of the university require an adequate response, namely, the introduction of innovative management techniques. These include: strategic planning, balanced scorecard, risk management, etc.

Nowadays strategic planning process becomes more and more important for Kazakh universities which provide the basis for managing a team of high school. Strategic planning is one of the basic functions of management, and the function of leadership, organization, control and motivation are aimed at implementation of the strategic plans.

The strategy formulates the basic goals and ways to achieve them so as to provide a single course of action to the whole staff of the university. Development and implementation of strategy is the most important function of top managers. Thus, the senior management level is the rector and vice-rector. Line managers are department chairs and the dean of the faculty, who work directly with students and faculty experts. The effectiveness of the educational activities of the university depends on the quality of management and professionalism of the teaching staff. Therefore, it is important to represent the role and contribution of each instructor to the common business.

Balanced Scorecard (BSC) is a tool for strategic and operational management, which allows linking the strategic goals of the business processes and daily activities of employees at every level of government, as well as to ongoing monitoring of the implementation of the strategy (Zhussupova and Murzagaliyeva, 2010). Today need innovative tools and methods of higher education, focused on the development of university teachers motivation to innovate. Building on the experience of business, we can develop and implement a university balanced scorecard, based on key performance indicators (Key Performance Indicators, KPI) (Zinov, Lebedeva and Tsiganov, 2009, p. 248), which are based on self-esteem and self-efficiency

potential within the organization. Note that the KPI can be applied in the implementation of differentiated pay, bonuses for performance evaluation for professional competitions, that is, those elements of innovation that can positively affect change in the traditionally existing management structure of teaching staff.

Balanced Scorecard (BSC) is a tool for strategic and operational management, which allows linking the strategic goals of the business processes and daily activities of employees at every level of management, as well as to ongoing monitoring of the implementation of the strategy (Volkov, 2012, p. 156). Today we need innovative tools and methods of higher education, focused on the development of motivational tools of university instructors to innovate. Relying on the experience of business, we can develop and implement a university balanced scorecard, based on key performance indicators (Key Performance Indicators, KPI) (Zinov, Lebedeva and Tsiganov, 2009, p. 248), which are based on self-esteem and self-efficiency potential within the organization (Zinov, Lebedeva and Tsiganov, 2009, p. 248). Note that the KPI can be applied in the implementation of differentiated pay, bonuses for performance evaluation for professional competitions, that is, those elements of innovation that can positively affect change in the traditionally existing management structure of teaching staff.

3   CONSLUSION

Risk management is one of the new methods to ensure sustainable and effective development of organizations, and involves the active use of the potential opportunities. Science-based and efficient operation allows knowingly take risks and to adequately respond to them. Organizations conducting targeted risk management, not only ensure the successful implementation of projects, but also become a reliable partner, and therefore long-term relations with investors (Praisner, 2009). Today, risk management is applied in Kazakhstan in large banks, insurance agencies and oil companies.

It should be noted that the methodological approaches to risk management in the field of education are actively being developed by Russian and foreign scientists. However, in the Republic of Kazakhstan such methods did not receive a significant development and practical application. In Kazakhstan there is insufficient scientific research practice of risk management in education, methods of construction of the internal control systems in higher education have not been actively used, experience of businesses has not sufficiently studied in which the system of internal control is based on the internal audit - an independent division on activities of which the executive bodies of companies can not affect.

Therefore, by solving the problem of modernization of higher education in order to improve the quality and effectiveness of activity, higher education institutions have to implement innovative management techniques.

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Challenges of the Modern World - Contemporary Economy and Globalization

THE CULTURAL FOOD DYNAMIC IN IRELAND

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ABSTRACT
Decision making with regards to food choice can be traditionally viewed as an economic transaction, whereby consumers make a choice of which foods they would like to purchase and consume within the framework of how much disposable income they have at any particular time. However, within this framework, research has shown that there is a balance that consumers aim to achieve between the hedonistic qualities of the food and the perceived effects it may have on their health. Consequently, one area that is of significant importance is the concept of how food risks are perceived and how this perception affects the decision-making process. Research has indicated that Irish food consumers use a set of heuristic decision-making tools in order to assist them in making food choices for themselves and their families. These decision-making tools are evoked irrespective of age, gender or social class. This has led to concern (despite numerous health promotion and media campaigns) regarding the national food diet, with imperfections in consumption observed in an increase in obesity, nutritional imbalances and chronic ill health which expose individuals to medical conditions such as cancer and heart disease. The increase risks associated with these are prevalent in Ireland and for many measures Irish consumers rank poorly with other countries in Europe. Although the food choices are predicated by these decision-making tools there are reflections of previous historical dietary choices that persist within the diets pursued today by the majority of Irish consumers. This in addition to the effects of acculturation following recent changes in the demographic structure and the growth global networks for information flow and exchange has resulted in a dynamic food environment with "nutrition echoes" observed in the choices people make.

Keywords: Diet, Food Culture, Risk Perception

1   INTRODUCTION

Food consumption patterns are affected by a host of social, psychological, sensory, and economic factors, and a number of theoretical models have been proposed to classify and understand these processes. Such models tend to relate dietary behaviour to environmental and economic factors and in many instances such models relate dietary behaviour to nutrient intake. However, with the impact of issues related to health and wellbeing, food is no longer seen as a means to satisfy a particular nutrient requirement (e.g., energy intake or protein requirement) but may be viewed as a contributor to overall health by some. The concept of risk associated with foods have also become commonplace with some foods described as "*unhealthy*" and may be detrimental to health whereas others are seen to promote well being and even connote a health outcome, and have been described as healthy or even "*super foods*". In addition, other issues regarding how the food is produced (e.g., GM foods), processed (e.g., use of additives) and pathogenic potential (e.g., bacteria such as *e-coli* or *campylobacter*) have also entered the mindset of the general public and impinge upon the issue. Although the latter do affect behaviour especially when highlighted by the media, it is the long term effect of poor diet that is of primary concern currently.

2   DIETARY ADVICE

The outcomes associated with poor diet generally fall into two categories – those that may lead to overweight and obese conditions, and those, which are more chronic in nature and are related to nutritional disorders (Eurodiet Project Steering Committee, 2001). The former has received the most attention as the incidence of obesity levels in the population as a whole has risen significantly in the past two decades (Childhood obesity, 2003; Campbell, 2004; Lowell, 2004), and is projected to rise to 50% of the population by 2030 with 25% of under 16 year olds also affected.

Currently it is estimated that in the UK 16% of 10 year olds are overweight and/or obese (Lowell, 2004). On the island of Ireland, these figures are thought to be higher with current reports indicating that a third of boys and a quarter of girls are carrying excess weight (Childhood obesity – a weighty issue for Northern Ireland, 2003b). For example, school-aged children in Northern Ireland have been shown to have one of the highest consumption rates of chips, crisps, sweets, and chocolate in Europe, particularly among 11 to 13 year olds (Vereecken and Maes, 2000). It has been observed that dietary behaviours developed during childhood are proven to be replicated later in life (Birch, Savage and Ventura, 2007), which has implications for health and wellbeing of the future adult population.

The risks associated with obesity have been related to a number of health problems. These include type 2 diabetes, heart disease, joint problems, and cancer (Dietz, 1998; McPherson, Montgomery and Nichamen, 1995; Warwick, McIlveen and Strugnell, 1999). Although energy balance is central to weight loss or gain, the consumption of energy dense foods (those high in fat and sugar) are seen as a major contributing factor. This is especially so in situations where there is a reduction of energy expenditure as a result of changes in leisure activities (Anderson et al., 1999; Department of Health and Human Services, 1996; Prentice and Jebb, 1995). Excess energy consumed, which leads to accumulation of fat, is a major worry especially if it is deposited around the waistline (Chan, Rimm and Colditz, 1994; Colditz, Willeff, Rotnitzky and Mamson, 1995). This situation may be compounded when decisions regarding food selection are made by parents which is an example of a form of surrogate decision making. Nutritional disorders that are also prevalent relate to levels of, for example iron, fibre, low or high density lipoproteins in the diet, that may not be visible as an immediate concern but are ongoing worries for health promotion agencies.

To assist the consumer there have been a number of health interventions aimed at promoting good dietary health from improved curricula in schools, wider media coverage of the main issues to labelling of foods giving broad level warnings to the consumer in the form of traffic warning lights. However, many health professionals are critical of that approach and would wish consumers to think of the diet holistically as either contributing to health and wellbeing or not. From this perspective a number of models have been designed to represent the features of a balanced diet all of which have the following common features, i.e., the best diet is one that is based on carbohydrates (breads, potatoes and other cereals) and is rich in fruit and vegetables. It should also include moderate amounts of milk and dairy products, meat, fish or meat/milk alternatives, and limited amounts of food containing fat and sugar (Beauchamp and Moran, 1984; Hunt, Strong and Poulter, 2004; Teobald, 2004).

3   THE FOOD CONSUMER ENVIRONMENT

Consumer behaviour relates to a process where individuals are involved in the complete act of purchasing and consumption of products (Summers, Gardiner, Lamb and McDaniel, 2003).

With respect to food, this includes their selection, purchase, preparation, consumption, and disposal. Traditionally the main criteria considered during this act have been a combination of prices, incomes, taste, and social attitudes, with price recognised as a key determinant (Ellis and Uncles, 1991; Gafton and Ness, 1991; Slattery, 1986; Wheelock, 1986; Woodward, 1988). Although the purchase of food is seen by many as an economic transaction, and income may be important as a final determinant (lower income families will spend less on food but with a greater percentage of their income (Shepherd et al., 1996)), there are a number of non economic factors that affect consumer choice. These range from issues associated with the wholesomeness of the food, where it may have been sourced, time available to prepare and eat, the family setting, and how safe it is to eat (Elaine, 1999; Kohls and Uhl, 2002; Koster, 2009).

The interrelationships between these factors and their effect on behaviour are regularly described in the form of consumer models (Solomon, Bamossy, Ashegaard and Hogg, 2010). These models can be simple input/output models reflective of the market place where the demand for products is seen as a relationship between the demand for food as a means to satisfy a need in the consumer (hunger, desire, social status, etc.) and how this is subsequently reflected in the final purchase. However, some researchers have developed more elaborate models that take into account all the variables related to the act of purchase and consumption including characteristics of the individuals and the social setting.

Various models that have been used to describe the behaviour of consumers the most complete of which are the comprehensive models, as described by Spooncer (1989) and Bareham (1995), and the descriptive models of Kotler (1988). These are multi-attribute models and they acknowledge that there are many types of factors which come together to influence the consumers' decision to perform a particular behaviour, or not to perform it, as the case may be. Examples of other comprehensive or descriptive models include those devised by Howard and Sheth (1969), Wierenga (1980), Hanneman (1984), Engel, Blackwell, and Miniard (1990), Worsfold and Griffith (1995) and Steenkamp (1997). These models tend to highlight the conflicting situation that many consumers find themselves in when making decisions regarding the selection and ultimate use of the food products.

However, for many food items the decisions regarding selection and use are generally made very rapidly and with little thought as they are perceived to be low involvement items (Beharrell and Denison, 1995). Under these conditions the consumer is said to be completing a routine purchase (Meyer, 1988). For other items there may be more involvement and the consumer may then weigh up a small number of attributes in order to make the decision (e.g., concerns related to calorie, fat or salt levels). In this case the consumer is said to be involved in limited problem solving (Sheth, 2011). However, when the consumer takes on board all the available attributes including marketing cues and other people's requirements (e.g., the family or children) then the consumer is involved in extended problem solving. This is rare in the case of food items unless there is a critical incident that is uppermost in the persons mind. This can occur during incidents such as "*food scares*", or with demands for a change in diet, or through personal experience, where the '*incident*' is now a major determinant and "*drives*" the consumer from making either routine or limited purchase decisions to the more complex extended problem solving scenario (Sheth, 2011).

In addition to this people get "*bored*" with the everyday decisions of selecting and consuming the same range of products and will at times enter a situation of seeking out new information

in order to change the product range and introduce variety into the diet (Venkatsan, 1973). Other drivers in this increased desire for variety may be changes in family circumstances, children requests, influences from TV and holiday experiences (Dammann and Smith, 2009; Lawrence and Barker, 2009; Thomson, Spence, Raine and Laing, 2008). When consumers enter a routine problem solving mode they are said to be involved in the psychology of simplification, whereas when they are engaged in limited or extended problem solving they are said to be involved in the psychology of complication (Howard and Sheth, 1969). This creates a natural rhythm to food purchasing with periods when the consumer is either consuming a restricted range of foods or expanding their choices and trying out new foods. However, in order to achieve the optimum solution the consumer will use a specific decision making strategy which may be applied at various stages of the consumer process - from initial purchase through to final consumption but is primarily associated with either limited or extended problem solving.

4 DECISION MAKING

All goods have intrinsic properties and it is these properties or attributes from which utility is derived, and this is the same concept for any food that may be purchased (Lancaster, 1991). Each food can be viewed as having a bundle of different attributes that are bound together and must therefore be considered simultaneously when a choice decision is being made. For the consumer it is difficult to consider all of attributes at the one time and generally only some play a significant role in practical decision-making. In addition the attributes associated with a specific food may often represent conflicting values, and in order to deal with these conflicts, people simplify the process through the use of different strategies. These strategies are the rules that people develop over a period of time for how and what they choose in recurring situations. They simplify food choice by eliminating the cognitive effort and time required for deliberation about every choice situation and a number of distinct strategies can be observed in individuals. These are summarised in Table 1.

The decision-making strategy that is chosen is dependent upon context and emerges from initial conscious food choice decisions for a specific situation and eventually become less mindful when that situation occurs repeatedly (Sobal, Bisogni, Devine and Jastran, 2006). However, one factor that has emerged in recent years as a major contributor affecting the consumer's decision making is the concept of the risks associated with the production, processing, preparation, and ultimate consumption of food (Nelson, 2004).

Table 1: Summary of the decision making strategies when making food choice decision

Linear strategy	Product attributes are estimated according their relative importance and alternatives are then compared. The decision rule is compensatory because the weak or negative characteristics can be compensated by strong or positive characteristics.
Additive difference strategy	The decision rule of additive differences is a sequence of paired comparisons of choice alternatives. The 'winner' of a paired comparison is then compared with another alternative and the loser is rejected.
Conjunctive rule	Conjunctive decision rules that there are minimum or maximum values that are required for one or more characteristics. The alternatives have to meet the requirements in order to be chosen
Disjunctive rule	This rule is based on an outstanding value of one attribute. An alternative is selected because of at least one superior attribute value, irrespective of the other attribute values
Lexicographic strategy	This strategy ranks the attributes in terms of perceived relevance or importance and alternatives are then compared on the most important attribute and the most desirable alternative(s) chosen. If more than one option is chosen then they are compared on the second most important attribute. This process continues until only one alternative remains.
Elimination by aspects rule	This strategy, similar to the lexicographic strategy, sets a cut-off point for the most important attribute, and allows all alternatives that meet or exceed that cut-off point to be evaluated on the second most important attribute's cut-off point. This process continues until only one alternative remains.

5   RISK

It seems that the behaviour of consumers seem to violate the rules of commonsense rationality. To try and understand this phenomena research has been carried out regarding how food risks may be perceived by the consumer and how these may affect the decisions made. When investigating perception two broad approaches can be followed. In most cases, perception is thought of as a physiological process whereby the brain interprets mainly visual stimuli into recognisable forms or shapes. However, when applied to the area of decision making perception is better viewed as the complete act of seeing and is not just concerned with the biochemical interpretations in the brain but how the stimuli are integrated into the complete act of perception, and integrate previous experiences and attitudes and knowledge the individual may have. Classically the perception of risk is based upon a set of general rules known as the risk heuristics. These are evoked when one does not have the full statistical evidence on hand to evaluate risks, which is generally the case with respect to food. Consequently people rely on what they remember hearing or observing about the risk in question and the heuristics help to reduce difficult mental tasks to simpler ones. These heuristics may be valid in some circumstances, but in others may lead to large biases, which subsequently affect risk assessment (Lichenstein, Slovic, Fischhoff, Layman and Combes, 1978). The heuristics are:

(1)   Availability

People use this to judge an event as likely or frequent if instances of it are easy to imagine or recall. Frequently occurring events are generally easier to imagine and recall than rare events. However, availability may be affected by numerous factors unrelated to frequency of occurrence, such as the coverage given to recent disasters or details provided in television

documentaries. Media coverage tends to concentrate on the spectacular at the expense of the common with the result that events which have a low frequency of occurrence may receive more "*air*" time than common occurrences. Applied to food risks, this would suggest people would underestimate, for example, the risk of certain dietary cancers, but overestimate the risk of botulism and this can seriously distort risk judgement (Furby, 1973).

The role of availability therefore indicates how people estimate how "*representative*" information to be. This then leads to errors in the use of the evidence, in that people:

a) ignore evidence about base rates in favour of secondary evidence (Smithson, 1989; Tversky and Kaheneman, 1974) and consequently anticipate signals in randomly generated data (O'Leary, Coplin, Shapiro and Dean, 1974);

b) become overconfident in the evidence presented due to the illusion of validity (Tversky and Kanheneman, 1974);

c) are insufficiently sensitive to the fragility of assumptions or the problems of small sample sizes (Fischhoff, Lichenstein, Slovic, Derby and Keeney, 1981; Tversky and Kahneman, 1971);

d) view chance events as self-corrective (Mathews and Hunt, 1985);

e) make conscious decisions to simplify analysis by excluding low-probability events from consideration (Fredenburg, 1988).

Most people as a result, find it difficult to understand "*low*" risks. They tend to ignore some risks entirely (e.g., cholesterol in the diet) or are very apprehensive even when scientific estimates show a low risk (e.g., pesticides, BSE) (Fisher, McClelland and Schulze, 1989), and are very likely to overestimate the risks of dramatic causes of death (Lichenstein et al., 1978).

(2)   Overconfidence
People are typically very confident in the judgements made by themselves to the extent that people believe that they can exert control over events (Ross and Fletcher, 1985; Strickland, Lewicki and Katz, 1966). This overconfidence is a trait or tendency in people when judging events that have uncertain outcomes (Fishhoff and Slovic, 1980). The psychological basis for this unwarranted certainty seems to be peoples insensitivity to the tenuousness of the assumptions upon which their judgements are based and the tendency to be optimistic about judgements of their own behaviour (Douglas, 1985). Although such perceptions as regards safety are obviously unrealistic, the risk looks very small from the perspective of the individual. Both the public and the experts are prone to overconfidence.

(3)   Desire for Certainty
Peoples desire to reduce anxiety caused by potential risks is commonly illustrated by denial. Denial is exhibited by people when faced with hazards but who view their world as either safe or predictable enough to preclude worry. This is analogous to the concept of "*selective attention to evidence*" and the resulting bias has been noted in having an effect in making judgements under conditions of uncertainty. These include a tendency to ignore or discount negative and disconfirming evidence (Lord, Lepper and Ross, 1979; Nisbett and Ross, 1980). This confirmation bias extends not only to selective attention, but also to selective information seeking, discounting, interpretation and testing.

(4)   It Won't Happen To Me
Overconfidence can also be observed in that people tend to consider themselves personally immune to many hazards whose societal risks they would readily acknowledge. This can be

expressed in the theory of "*optimistic bias*" (Weinstein, 1989), where individuals appear to have a decreased subjective probability of the occurrence of negative events, but an increased subjective probability for positive events. McKenna (1993) explains this bias as a need to control situations, such that the perceived control reduces the subjective probability of personal risk associated with the hazard in question.

Consumers therefore have to process a lot of information, and compare it with many cues and biases they may or may not have. Information related to this risk is treated with scepticism if it does not tally with the persons own perception of risk. This means that people are very selective in what they believe in, and will take on board only, in most situations, what suits their biases (Fischhoff, Bostrom and Quadrel, 2002).

The concept of risk is important for understanding how consumers make choices (Grewal, Gotlieb and Marmorstien, 1994; Mitchell, 1999) and food products have been a consistent feature of perceived risk studies over the years and a study into the risk management behaviour of the Northern Ireland food consumer (Nelson, 2004) revealed how the risks were considered. This study identified that the consumer allocates all the risks associated with food (from production, processing through to consumption) into two identifiable groups in order to simplify the decision making processing. Group 1 relates to the risks associated with the processing of the food. These were thought of as "*extrinsic*" risks i.e., the risk had been added to the food in some way or other by a third party and related to processing and production and related referred mainly to food pathogens and contaminants. Group 2 risks where those risks associated with the product itself. These were thought of as "*intrinsic*" risks and related to the nutritional content of the food, mainly salt, sugar, and fat. However, the perception of the risk (whether in group 1 or 2) was based upon three characteristics of the risk itself – the fear the risk evoked in the individual, how involved the person was in the risk "*decision*" and finally how new the risk was. Although the fear component was instrumental in terms of reacting to new information, involvement was seen as key to managing the risk. As the fear component rose (in any risk scenario), but if the consumer was involved more in the decision making process and was provided with timely and relevant information, the risk could be controlled. Crucially this related to information regarding coping mechanisms related to how to deal with the risk in question.

One other factor also played a role in the effect the perceived risk had on the decision making process – that of prior experience. The effect of this was observed to be akin to the process of inoculation (Nelson, 2002), in that the initial encounter sensitised the individual to future risks, and if the risk was encountered again then a severe change in behaviour was observed. Crucially this was observed across all food categories and was not confined to the food product to which the risk was initially related. For example, a risk observed with beef would also affect how the consumer searched for information and made decisions related to the purchase of other red meats such as lamb or pork. Again active communication regarding the management of the risk was seen as an important tool to help reduce this "*reaction*".

It is, however, recognised that consumers consider not only the risks associated with a particular product when making a judgement but that perception of benefits also plays a part (Conner, Povey, Sparks, James and Shepherd, 1998). Based on this, a number of studies have been conducted, which examine consumer perceptions of both risks and benefits associated with various foods or food hazards. Studies that have examined both risk and benefit perception suggest that risk and benefit perceptions are considered as separate entities, when

it comes to making judgments. This is consistent with analytical approaches to decision-making, which often treat the perception of risks and benefits as two distinct concepts, which are then considered separately and weighed against each other when making a choice.

Alternatively, the perceived risks and benefits can be viewed as inversely related, resulting in the two concepts being considered together when making a product choice. In essence, when consumers are selecting foods to prepare and consume they are weighing up the benefits of the food – taste, nutritional value (positive), convenience against the risks associated with the food and or preparation – nutritional value (negative), possible additives and contaminants etc. In a study on the risk benefit analysis of three commonly consumed products (beef burgers, bread, and milk) carried out in 2007 identified that once the level of risk had been identified then different decision making strategies were employed. If the overall view of a product was that it was of high risk then the consumer was more like to employ a face trade-off strategy when making a judgment. Conversely if the overall view of the product was that it was less risky, then a more relaxed decision-making strategy was used (Windrum, 2007).

One further effect that has been observed that affects food choice behaviour is the changing cultural landscape in which the choice decisions are made.

6 THE CHANGING CULTURAL LANDSCAPE

Society can be identified and characterised by many factors such as language, religion, customs, values and beliefs, and these all form part of our culture. An outcome of this is that our behaviour may be seen as a way of distinguishing an individual of one group from individuals of another group (Hofstede, 1984). Ones food culture is more specific, and may be described as a combination of tastes, cuisines, and practices which are reflected as dietary habits and as such make an important contribution to our food decisions. It is now recognised that our food habits change as we adapt to travel, immigration/migration, and the socio-economic environment. The food culture in Ireland has changed dramatically in recent years following the growth of the large multinational supermarkets after their entrance to the country in the 1990's. This has led to an increasing availability of food, both raw and processed, to the consumer. It was widely recognised that the dietary habits in the country were changing, but with a reliance on more traditional foods and means of preparation and eating centred on the potato.

Specific potato dishes include potato-based dishes such as "*champ*", "*pasties*", "*boxty*", and the ultimate collaboration between potato and bread – "*potato bread farl*". Further traditional Irish recipes promoted featuring potatoes include Irish stew and "*colcannon*". It is not only the presence of potatoes that are thought of as a feature of the diet but how they are eaten - either fried, roast, baked and simply boiled in their "*jackets*" to be peeled ceremoniously at the table. However, this scene, idyllic though it may be, has changed.

Culture can be viewed as a dynamic process liable to change where people learn to make adjustments to their norms and values as a result of contact with other groups of people exhibiting a different culture, through a sharing and transfer of common experiences and knowledge, a process known as acculturation (Lee, Sobal and Frongillo, 1999; Wenkan and Wolff, 1970). The acculturation process can occur at both an individual or group level and may continue for years and will in all likelihood vary in pace and levels. The acculturation process is highly influenced by the individual as some may choose to lose their original

cultural identity while others may choose to integrate elements of the new culture into their original culture.

A multidimensional model developed by Keele and Padilla (1987) holds that an individual's level and speed of acculturation will depend on the individual's level of cultural loyalty and knowledge. The individual who shows more loyalty and more knowledge of their heritage culture, than they do of the incoming culture, will be less acculturated than the individual who possesses more knowledge of the host culture. Some may require little change, for others change may be fundamental and if motivation is low or nonexistent, acculturation will be minimal.

Food habits and traditions are the foundations of our food culture and there is no cultural group for whom traditional foods are not an important symbol of their culture inheritance and their ethnic identity. While we cannot choose our ethnic identity, we can change it. As we encounter and observe new cultures we may imitate and adapt their trends, behaviours and customs that in turn will result in changes in our food choice and our food habits.

With growing interdependence between countries, and cheaper more accessible means of transportation over the past ten years the United Kingdom, including Ireland, has witnessed a dramatic change in the movement of its population. This has included the growth of people holidaying in other countries on more than one occasion in the year to the recent movement of people from other countries (mainly EU citizens) in search of employment. For decades emigration exceeded immigration in Ireland, but this position slowly started to change in the late 1990's and early 2000's when Northern Ireland and the United Kingdom started to become major recipients of international labour migrants.

The Ireland economy as a whole has benefited from the inward migration of labour from countries such as Portugal and Poland, and migrants into Ireland have made a significant contribution to filling the labour forces gaps in food processing, agriculture, healthcare, hospitality, and catering sectors. As people constantly move to other countries, cultures become more integrated and as a result consumer needs become more sophisticated (Sharma, Cade and Cruickshank, 1999).

However, it is not just the inward migration of people that may affect the food eating behaviours but also the media coverage of diverse food health issues and the regular advertising of foods. Food producers and processors (representing global concerns) invest considerable amounts on advertising and packaging to capture the interests of the consumer. The growth of the larger food retailers along with the food service sector, with their extended supply chains have delivered a vast array and choice of foods to be considered by the consumer on a daily basis. Food advertising is also a noted source regarding information associated with aspects of convenience and availability and in one particular example advertising directed at adolescents is seen to focus on fast foods which are generally high in calories.

This was reinforced by the British Medical Association, which has made several recommendations including a ban on the advertising of unhealthy foods for children, the encouragement of price promotions on healthy foods instead of sweets/chocolates etc, and clear nutritional labelling and healthy advertising in schools. The influence of the TV chef preparing and cooking specific menu choices can also be seen to effect demand for a

particular food. This television format is a popular programme that can be viewed most evenings and is usually followed with the publication of the relevant book that again is bought widely by the general public.

Up until the mid 1990's there was relatively little change in the food culture. What was consumed was primarily based on ingredients and foods from the home market and the UK, with a tendency towards plain, well cooked, meat, potato and vegetable meals, with few frills and sauces. However this has now changed and the Northern Ireland consumer is more likely to sample new foods, which have resulted in changes to the traditional meat and potatoes diet and a much more varied diet.

7   A MODEL OF FOOD CONSUMPTION

The Northern Ireland consumer, when making a choice of what to eat at any particular time is dealing with a large number of competing issues in order to make the final decision. Two main themes have emerged in recent years that have affected this process. The first is the ongoing concern regarding the risk associated with eating food. Although in the past this has highlighted issues associated with how the food is produced or processed in the form of contaminants, the concerns now are more related to the nutritional risks of the food. These are constantly being weighed against issues associated with the obvious benefits of the food in terms of its taste and the feeling of being satiated after consumption.

The second theme is the continued change in the culture of eating brought about by ever closer contacts with practices from outside of the island. These pressures for change could be in the form of new food products being considered e.g., dishes from other countries but also includes influences related to how convenient the food may be e.g., fast food outlets with the availability of burgers etc as well as the influence of recently migrated people to the area.

These changes are widespread and are especially visible in adolescents and young adults, but have also been observed at other levels within society including the elderly. The changes also reflect upon the dynamic nature of the food culture in Ireland and the rapid movement of tastes and desires more indicative of a modern consumer. However, echoes from the past reflecting a more traditional Northern Irish food culture can still be seen today (Walsh and Nelson, 2012). Traditional bread products are widely consumed, potatoes are a regular feature on most people's weekly fare, and the practice of eating together at set times still occurs.

Figure 1 summarises the main factors affecting food choice emerging from this review. It envisages a consumer balancing the competing demands of the benefits associated with the food and the risks that may be inherent in the consumption of the food in question. In order to arrive at a satisfactory conclusion the consumer uses an appropriate decision making strategy that weighs these twin issues. The perception of the risks and benefits are affected by their perceptual framework employed at that moment in time. For example, if a food risk issue has been highlighted in the media and is brought to the attention of the consumer then the perceived benefits of choosing that food would have to be considerably enhanced for the choice to be made. The reverse would happen if the food product was perceived as beneficial to the consumer a decision could be made whereby the risk is deemed acceptable.

Cultural Echoes from the Past

Risks		Benefits
.Diet		.Taste
.Microbiological		.Nutrition
.Contaminants		.Social
etc		.Time
		etc

Health Intervention Programmes — Cultural Change

Food Chosen

Risk Perception Framework — Risk Perception Framework

Decision Making Strategy
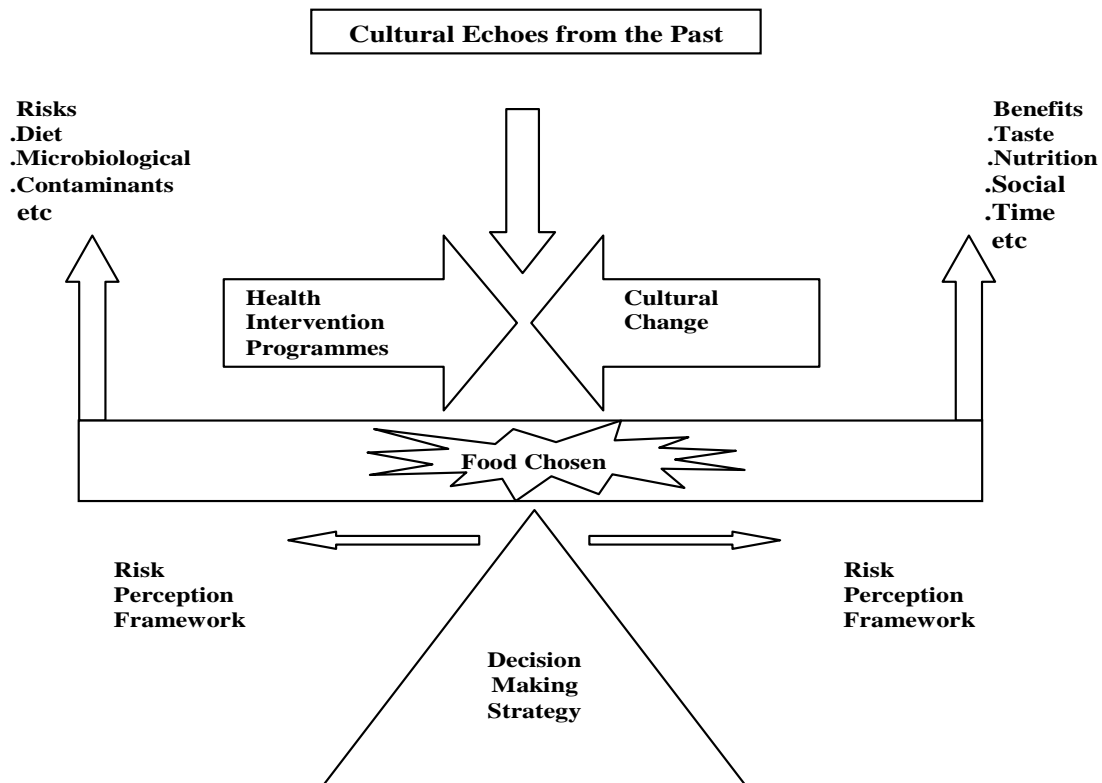
Figure 1: Summary of the influencing factors affecting food choice in Ireland

However, there is an overarching framework in which the decisions are made and that is the interchange between the driving forces of the cultural change process against the advice provided from the health promotion agencies. On the one hand there is the move towards the consumption of more convenient foods that are in many instances high in fat and/or sugar against the pressure exerted by the ongoing message of healthy and safe eating. The achievement of a healthy and balanced diet relies on the compromise between these two competing forces. One moderating aspect of this interplay has been the influence from the food cultural heritage. There still remain vestiges of the past emerging in dietary behaviours. These can be described as cultural echoes in the sense that their origins may not be known but can still be "*heard*" and observed by others.

These echoes not only influence the foods chosen but how they may be purchased, prepared in the home and with whom they are eaten. For example in a recent study of the nutritional eating habits of pregnant mothers in Northern Ireland, it was identified that those mothers who relied on a more traditional eating pattern did have a healthier food intake with a better balance diet (Coyle and Nelson, 2011). This was a strategy employed specifically by those with lower levels of nutritional knowledge than their peers. It is perhaps these echoes that need to be investigated further as they may be the key to reversing the trend of obesity and related health issues in Ireland.

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FUNCTIONAL UPGRADING IN GLOBAL APPAREL VALUE CHAIN: THE CASE OF VIETNAM

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ABSTRACT
Developing countries like China, India, Bangladesh, and Vietnam are now the largest exporters in global apparel markets mainly due to their participation in the international production networks that are leaded by global buyers. Most of the garment export manufacturers in these countries are found at the low value-added production part of global apparel value chains. There is still a debate on the functional upgrading prospects of these countries although the East Asia newly industrializing countries (NIEs) are generally considered as success stories of moving up from mere assembly to selling their own branded products globally. There is still lack of empirical studies on the current position of developing countries in global apparel value chains. The purpose of this study is to fulfill the gap by examining the case of Vietnamese garment manufacturers. This study is based on secondary sources as well as primary data collected from field study. The field study involved mass survey using questionnaire and in-depth interviews with enterprises, the textile and garment associations and government agencies. The findings show that Vietnamese garment manufacturers, especially SMEs, usually rely too much on powerful foreign buyers in GVC who do not want to share their core competencies in supply chain management, design, marketing and branding. In combination with other external and internal factors, this discourages these firms from functional upgrading. Most of them can not move up to original design manufacturing (ODM) form of exporting and often compete in production sphere in positive way through product and process upgrading or in negative way through squeezing wages and profit margins. The manufacturers who are serving GVC-buyers and non-GVC buyers at the same time are likely to be more successful in functional upgrading than those who are serving only GVC-buyers.

Keywords: Developing countries, Functional upgrading, Global value chain, SMEs, Vietnam

1   INTRODUCTION

Garment is a fast-growing industry in Vietnam with the annual export growth rate from 2001 to 2011 was about 20 percent (GSO Vietnam). After the changes in international trade arrangements in 2005 (the end of MFA/ATC), Vietnamese garment industry has sustained this high level of average export growth regardless of only one year decrease by 2 percent in 2009 as an impact of decrease of demand in major markets due to economic recession and financial crisis. In 2010, Vietnam was the second largest exporter of garment and textile to the US, the third largest to Japan and the EU and the fifth largest globally (VITAS). In 2011, the garment industry gained US$13,15bn (WTO statistics) which contributed around 13,5% of Vietnam's total export and has surpassed crude oil to become Vietnam's largest foreign exchange earner (GSO Vietnam). However, more than fifty percent (50%) of garment export dollars is spent on importing input materials because more than sixty percent (60%) of total

export turnover is carried out under Cut-Make-Trim (CMT) form of exporting in which Vietnamese exporters are responsible for only assembly of imported input materials.

In global apparel industry, although developing countries account for more than seventy percent (70%) of the total global garment export, their share of the global garment value-added is less than thirty percent (30%). In contrast, industrialized countries (mainly the US, the EU and Japan) are major garment importers but account for more than 70 percent of the global value-added in garment (Tewari, 2005; Fernandez-Stark, Frederick and Gereffi, 2011). This phenomenon was explained by the theory of global value chain (GVC) which is rooted in World Systems theory by Hopkins and Wallerstein and developed later by Gereffi and other scholars. A commodity chain is defined as *"the whole range of activities involved in the design, production, and marketing of a product"* (Gereffi, 1999). A particular firm may participate in the value chain of a given commodity (product and service) by choosing one or several actitivies to focus on. Value chains become global when activities in the chains are performed in different parts of the world. In global apparel value chains (GAVCs), low labor-cost developing countries such as China, India, Bangladesh and Vietnam are key players in the low-value assembly segments of the value chain, while developed countries focus on high-value segments such as design, marketing and branding (Fernandez-Stark, Frederick, and Gereffi, 2011). These developing countries, however, can gradually move up to higher value-added segments of value chains (Gereffi and Memedovic, 2003). Gereffi (1999) considers East Asia NIEs (Hong Kong, Taiwan, Singapore and South Korea) as successful stories in moving up from CMT form of exporting to original equipment manufacturing (OEM) and then, to original design manufacturing (ODM). However, Schmitz (2004) claims that the upgrading prospects of firms in developing countries depend on the type of value chains they are participating in and although GVCs can foster product and process upgrading, they hinder functional upgrading. There is still lack of empirical research to conclude this debate. The purpose of this study is to fill this gap by answering two main questions: what is the current position of Vietnamese firms in global apparel value chains? What are the obstacles to functional upgrading of Vietnamese firms in global apparel value chains?

By giving evidence that garment export firms in Vietnam are found mostly at the low-end part of GAVCs, this study supports the argument that the barriers to functional upgrading of developing countries to high-end part of GAVCs are high (Humphrey and Schmitz, 2002) as well as increasing (Palpacuer, Gibbon and Thomsen, 2005). This is our first contribution.

The second contribution of this study is to examine the different types of relationships between the Vietnamese garment export manufacturers and their buyers. This study supports the argument that the captive relationships between Vietnamese manufacturers and their GVC-buyers hinder functional upgrading to ODM and OBM models meanwhile their relationships with non-GVC buyers are market-based or balanced-network so ODM or ODM forms of exporting are much more popular.

Our final contribution is the focus on SMEs and the finding that SMEs are facing more challenges than large enterprises in functional upgrading in GVCs although they can reach to ODM and OBM forms of exporting to non-GVC buyers.

The remainder of this paper is organized as follows. Firstly, we provide a theoretical framework. This is followed by a discussion regarding the methodological aspects of the

study. We, then, discuss the results and explore the implications. Finally, we conclude the paper by identifying the limitations of the study and the directions for further research.

2   THEORETICAL FRAMEWORK

The world economy has been characterized by the globalization of production and trade for decades (Gereffi, Humphrey and Sturgeon, 2005). In many industries, participating in GVCs has been increasingly a common way to integrate into the global economy. In apparel industry, the starting point of firms in developing countries is entering into the lowest value-added assembly segment of GVCs mainly due to their low labor-cost advantage. They can, later, enhance its position in value chains through: (i) process upgrading which refers to increasing the efficiency of internal processes; (ii) product upgrading which refers to introducing new products or improving old products faster than rivals; or (iii) functional upgrading which refers to increasing value-added by changing the mix of activities undertaken by the firm (Kaplinsky and Morris, 2000). The up-movement from low value-added part to higher value-added part of the chains is called as functional upgrading. According to Gereffi (1999), the main stages of functional upgrading are:

- Stage 1: Assembly/Cut, Make, and Trim (CMT): the suppliers are responsible for cutting, sewing and trimming;
- Stage 2: Original Equipment Manufacturing (OEM)/Full Package/Free on Board (FOB): the suppliers are responsible for the CMT activities, financing and sourcing material inputs;
- Stage 3: Original Design Manufacturing (ODM)/Full Package with Design: the suppliers focus on adding design capabilities to the production of garments;
- Stage 4: Original Brand Manufacturing (OBM): the suppliers focus on branding and the sale of own-brand products.

As global apparel value chains are buyer-driven chains, the global buyers play a leading role in the chains and occupy the highest value-added activities in the chains, namely design, marketing and branding. They decide not only what are produced but also how to organize the production process although they do not directly involve in it. Through defining the structure of production chains, they also decide who participate in the value chain and the roles of each participants (Caspari, 2003; Gereffi, 1999). East Asia NIEs (Hong Kong, South Korea, Taiwan and Singapore) have been successful in moving from CMT suppliers to OEM and then to ODM suppliers for global buyers. Some firms in these countries such as Li & Fung Limited are now OBM exporters in regional markets. However, latecomers in global apparel value chains like developing countries in Asia are facing more challenges to functional upgrading objective than the East Asia NIEs twenty years ago.

With respect to developing countries, the barriers of entry into high value-added activities in GVCs such as design, marketing and branding are much higher than the barriers of entry into the production sphere. The first barrier is the enormous amount of investment capital required for carrying out marketing and branding activities in global scale (Thoburn, 2009). The other important barrier is the nature of governance of the global value chains. Governance of the value chains refers to who coordinates the various value-added activities and how value is distributed within the chains. In global apparel value chains, global buyers decide how functional upgrading may occur (Gereffi, Humphrey and Sturgeon, 2005). The relationships between lead firms and their suppliers are described by Humphrey and Schmitz (1999) and Schmitz (2004) as "quasi-hierarchical" or "captive" network in which the lead firms exercise control over other firms by setting "the rules of the game" for operating in the value chains.

Challenges of the Modern World - Contemporary Economy and Globalization

The core competencies of the global buyers are design, marketing and branding so they try to block the development of these capabilities of their suppliers.

Global buyers are setting increasingly stringent "international" and "private" standards such as environmental, social and labor standards as the conditions for the garment export manufacturers to become their suppliers. Besides, their requirements regarding quality, price, delivery time, flexibility and responsiveness for their production supplier are also increasingly high (Abonyi, 2005). As the result, even maintaining the production position in GVCs is not an easy task for firms in developing countries. Schmitz (2004) also mentions the other types of relationships between the buyers and the suppliers such as market-based (suppliers and buyers are independent and deal with each other in arm's length transaction), balanced network (suppliers and buyers co-operate and have complementary competences but no control over each other) and hierarchy (firms are vertically integrated, the parent company controls its subsidiaries). Besides these barriers, there are also many location-related obstacles to the functional upgrading of firms in developing countries. Firstly, while garment production technology is quite basic and popular, the design, marketing and branding activities involve deep knowledge about customers' preferences. End-users in global apparel value chains are mainly in developed countries in the US, the EU and Japan. Therefore, due to the cultural distance it is difficult for firms in developing countries like Vietnam to gain this knowledge. Secondly, in comparison with developed countries, developing countries have low-cost labour advantage for assembly activities but the shortage of high-skilled labour for management, design, marketing and branding is their disadvantage.

Regarding the firm size, Lall (1991) realized that in developing countries the prospects of functional upgrading in GAVCs to large firms are clearer than to SMEs. This is reasonable because SMEs are in disadvantage of financial, human resources and production scale.

3   RESEARCH METHODOLOGY, RESULTS AND DISCUSSION

3.1   Research methodology

Primary data was collected from garment export firms in Vietnam. Data from the Vietnam Textile and Apparel Association (VITAS) showed that in 2009 there are around 2,300 garment and textile enterprises in Vietnam including 370 trading and service enterprises and nearly 1,200 garment export manufacturers. Of these 1,200, 150 are state-owned enterprises (SOEs); 350 are foreign-invested enterprises (FIEs) and 700 are domestic-owned private enterprises. From the lists of garment export firms provided by VITAS and the Vietnam Chamber of Commerce and Industry (VCCI), 560 firms with contact information were drawn. Cross-sectional surveys were conducted using many modes of data collection, including face-to-face interviews, telephone interviews and mailed questionnaires.

We employed a high level of personal involvement in order to acquire data. We contacted chief executive officers (CEOs)/managing directors (MDs) by telephone to explain the purpose of the study, to ask for cooperation and to identify the firm's appropriateness for the research. 495 firms met the criteria of having garment export turnover in the past three years. Of the 65 firms excluded, 16 could not be contacted due to incorrect contact details, 35 have no garment export activities in the past three years or domestically focused, 14 refused to answer. The questionnaires were sent by post and by email to the CEOs/MDs, then, were followed up by telephone again.

Secondary data was collected by online desk research, government published date and in-depth interviews with senior experts in the industry such as Vice Director of VITAS, Director of Post-clearance Customs Audit Office.

3.2 Results

The survey took place from April to June 2011. We received 254 complete and usable responses from the population of 495 enterprises, giving us a response rate of 51.3%. The respondents include 38 state-owned enterprises, 161 domestic-owned private enterprises, 55 foreign-invested enterprises.

Main markets for Vietnam's garment exports before 2002 were the EU and Japan, which accounted for 30.3 percent and 29.8 percent of the total garment export of the year 2001, respectively. Right after the Bilateral trade agreement (BTA) between the US and Vietnam coming into force in 2001, the Vietnam's garment export jumped from 1,975 million US$ to 2,755 million US$ with the export volume to the US market alone is 951 million US$ accounting for 34.5 percent of the total export volume. From 2003 to 2011, the US market always account for around 50-55 percent of the total export turnover. This percentage in case of the EU is about 20 percent, Japan is about 10-15 percent, and in case of the other remaining markets is about 15 percent (GSO Vietnam).

Regarding the firm's buyers, this study differentiates them as GVC-buyers and non-GVC buyers. GVC-buyers refer to the buyers who are taking part in global apparel value chains such as global buyers in developed countries, first-tier suppliers in East Asia NIEs and second-tier suppliers in other developing countries. Non-GVC buyers refer to the buyers who are not members of GVCs even though they are located in the US, the EU, and Japan. The respondents accept this differentiation. For garment export manufacturers, the sign to realize the types of buyers is their role in controlling production process. Different from GVC-buyers, non-GVC buyers do not involve in organizing production process.

Of total 254 firms, 125 are participating in GVC only (exporting to GVC-buyers only), 64 are not participating in GVC (serving only non-GVC buyers) and the remaining 65 are serving GVC as well as non-GVC buyers. Regarding to the forms of exporting to GVC-buyers in the past three years, the percentages of the firms that have CMT, OEM and ODM as the highest value-added form of exporting are 63,7%, 30,6% and 5,7%, respectively. This reflects the fact that most of the Vietnamese firms are locked in the low-end production part of global value chains.

With respect to firm size, according to VITAS, most of SOEs and FIEs garment manufacturers are large enterprises with more than 300 employees (as defined by Vietnamese government under Decree 56/2009/ND-CP). Most of garment manufacturers that have less than 300 employees (SMEs) in Vietnam's garment industry are domestic-owned private enterprises. This is also reflected in our finding.

90,7% of SMEs in our sample are CMT suppliers and 9,3% are OEM suppliers for GVC-buyers. Meanwhile, the percentages of CMT, OEM, and ODM suppliers for GVC-buyers among large firms are 56,0%, 36,7% and 7,3%, respectively. This result is in line with the findings of Abonyi (2005) and Caspari (2003) that most of SMEs are participating in the labor-intensive and low value-added assembly part of the global production process. SMEs that are OEM suppliers in GVCs are, at the same time, the OEM or ODM suppliers for non-

GVC buyers while SMEs that participate in GVCs alone are performing only CMT functions. There are no SMEs with ODM form of exporting to GVC-buyers.

Concerning the firm ownership and export experience, it is found that they are both related to the forms of exporting. The ownership structure of Vietnam's textile and garment industry is a mix of large state-owned enterprises (SOEs), domestic-owned private enterprises and foreign-invested enterprises (FIEs) which consists of joint venture enterprises (with SOEs or private enterprises) and 100 percent foreign-owned enterprises. FIEs' export turnover accounts for about 50 percent of the total exports of the garment industry (VITAS). Of 55 foreign-invested enterprises participating in our survey, 47 are 100-percent foreign-owned enterprises and 8 are joint ventures with a Vietnamese state-owned or private enterprises. All 100-percent foreign-owned enterprises are subsidiaries of garment manufacturers based in Hong Kong, South Korea, Singapore, Taiwan, and China. All of them situate in the lowest note in the apparel value chains, namely CMT while their parent companies in home countries concentrate on higher value-added functions such as supply chain management and design. Most of SOEs are large enterprises and have more than ten-year export experience. Of which, some firms have even more than thirty-year export experience and many firms have both foreign and domestic markets. They are, at the same time, ODM or OBM suppliers in domestic markets, OEM or ODM suppliers for non-GVC buyers and ODM or OEM suppliers for GVC buyers.

Firm's export experience does not play a significant role in determining functional upgrading from CMT to OEM but it is a related factor for moving from OEM to ODM. This supports the above arguments that the barriers of entry into the labour-intensive production part of GVC are much lower than the barriers of entry into knowledge-intensive and high value-added segment of GVC.

3.3   Discussion

Overall, the findings show that the biggest challenge for garment firms in Vietnam now is not how to get access to global markets but how to do this in a way that allows sustainable growth and high profit margin. The Vietnamese export manufacturers realize that they can achieve this objective through product upgrading, process upgrading, or functional upgrading. They have gained some achievements in product upgrading such as moving from low profit margin to higher profit margin products or in process upgrading which results in improvement in productivity, product quality, time of delivery, and flexibility. However, they are, until now, not very successful in functional upgrading to high value-added part of GVCs. Domestic SMEs are primarily locked in Cut-Make-Trim activities. Better than SMEs, large enterprises are able to engage in logistics and design activities but the percentage of OEM or ODM export volume is much smaller than CMT export turnover.

With respect to external factors, according to the CEO/managers the main obstacle to moving up further is the captive relation with the firms' buyers. Vietnamese garment manufacturers are mainly participating in GVCs in these ways:
  - involving in "*triangular*" manufacturing relationship with first-tier suppliers that are mostly based in South Korea, Hong Kong, Singapore and Taiwan;
  - subcontracting with regional traders, mainly from South Korea, Hong Kong, Taiwan, Singapore or Japan;

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- contracting directly with global retailers who have representative offices in Vietnam or in neighboring Asian countries (like in Hong Kong, the leading hub in the global garment industry).

In these *"triangular"* manufacturing relationships, first-tier suppliers receive orders from global buyers, then, organize their production in their own foreign-invested enterprises in Vietnam, or pass the orders to Vietnamese manufacturers. The core competencies of first-tier suppliers in East Asia NIEs at the moment are design and coordinating production networks. They are, therefore, unlikely to leave the management of the supply chain to their Vietnamese suppliers. Meanwhile, there is no such kind of barrier arising from the relationships between the Vietnamese manufacturers and non-GVC buyers. The CMT suppliers in GAVCs, at the same time, can be ODM or OBM suppliers for non-GVC buyers. This supports for the argument of Schmitz (2004) that the upgrading opportunities are determined by the types of governance in value chains and types of relationships between the suppliers and the buyers.

The result shows that the relationship between firm size and form of exporting is statistically significant in case of exporting to GVC-buyers but is not statistically significant in case of exporting non-GVC buyers. CEOs/MDs mentioned the same reasons that are found in literature review that in comparison with large enterprises, SMEs are in disadvantage of functional upgrading in GVCs due to constraints of resources and production scale. In contrast, non-GVC buyers usually order smaller quantity than GVC-buyers and investment in design, marketing, and branding activities targeted at non-GVC end-users requires smaller amount of money. On the other hand, CEOs/MDs of some SMEs revealed that they are still reluctant to move from CMT to OEM form of exporting in GVCs even if they are able to finance for sourcing input materials. The reason is that the increase in transaction cost per unit price depends on the size of the orders, then, the size of firms and they are in disadvantage in comparison with large enterprises.

CEOs/MDs provided some explanations for the finding that functional upgrading prospects and results are different when considering the firm ownership. FIEs are mainly CMT suppliers for their GVC buyers. Most of FIEs are 100-percent foreign-owned with the investors coming mainly from South Korea, Hong Kong, Taiwan, and Singapore. These investors were attracted to Vietnam for the assembly cost advantage due to Vietnam's low wage rates. The parent companies are responsible for finding the buyers and doing higher value-added activities, namely sourcing input materials and design. The managers of FIEs revealed that it is, now, not the time for the parent companies to move these activities to their subsidiaries in Vietnam because Vietnam is still lacking the necessary conditions for developing these capabilities such as high-skilled labor force and strong textile and accessories industry. However, they are preparing for this movement by recruiting the Vietnamese designers to work in the parent companies and building or investing in textile factories in Vietnam. The in-depth interviews with the CEOs/MDs of domestic-owned firms, both SMEs and large enterprises, revealed that they are facing high competition from FIEs in CMT production because the productivity of FIEs is higher. Moreover, many parent enterprises of these FIEs are at the same time the buyers of domestic-owned firms and they give the first priority to their subsidiaries.

4 CONCLUSION

In summary, there is little evidence that the Vietnamese garment manufacturers are successful in moving up to ODM and OBM form of exporting in GVCs or are concentrating on this

objective. Opportunities for functional upgrading in GAVCs are limited for firms in developing countries not only for SMEs but also for large enterprises. Although the garment export turnover keeps growing with quite high rate of twenty percent, the Vietnamese garment producers are still locked into production part of global apparel value chains. The global lead firms know most about consumer preferences and future market developments but they are not willing to share this knowledge even to their historical first-tier suppliers in East Asia NIEs because this knowledge constitutes their core competencies and their competitive advantage. Even if large Vietnamese manufacturers are able to establish direct relationships with global buyers, they may be locked in a position where functional upgrading is possible only to OEM or ODM. The obstacles to SMEs in developing countries for functional upgrading in GVCs are higher than to large enterprises due to the size factor. Being subcontractors of the first-, second- and even third-tier suppliers, they may end up in manufacturing position without any prospects for functional upgrading to OEM or ODM. The main focus of most Vietnamese firms, especially SMEs, at the moment, is not functional upgrading but product and process upgrading in order to keep up with the global buyers' increasing requirements in terms of quality standards, speed and reliability of delivery, flexibility and responsiveness, and other international and private standards such as labor and environment standards. However, there are still some firms, especially those who already involve in ODM/OBM form of exporting to non-GVC buyers or in domestic market are trying to develop the capabilities of managing production networks, design, and marketing in global market. These firms are usually domestic-owned large firms, with long-time export experience. As the learning opportunities provided by the GVC-buyers for improving the design and marketing capabilities are limited, the manufacturers have to learn by themselves by applying the lessons learned from serving other markets and combine them with their self-accumulated knowledge about consumer's preferences.

The results obtained from our study can be particular helpful for domestic-owned garment manufacturers. Vietnamese firms are latecomers in global apparel value chains. The barriers of entry into high value-added activities are even higher than in case of East Asia NIEs twenty years ago. Moving up to OEM or ODM form of exporting in GVCs means those Vietnamese manufacturers must compete directly with their current GVC-buyers who are first-tier suppliers of global buyers. East Asia NIEs used to rely on support and knowledge transfer from their global buyers to build their logistics and design capabilities but it is less likely that Vietnamese manufacturers will receive such kind of support from global buyers because global buyers are not in urgent need of doing that as twenty years ago. Although the opportunities for functional upgrading in GVCs are limited, many Vietnamese firms are successful in ODM or OBM models for non-GVC buyers or domestic buyers and therefore have their own logistics, design, marketing and branding capabilities. Then, they can strengthen these capabilities to meet the demand of global buyers. In summary, firms should take into account the market selection decision when pursuing the functional upgrading objective. Market selection choices include serving the GVC-buyers alone or serving GVC-buyers and non-GVC buyers or domestic buyers at the same time.

This study is subject to several limitations that suggest some directions for future research. Firstly, cross-sectional surveys rather than longitudinal surveys were employed. This cross-sectional research focused on looking at the firms at a specific point in time. We can not show the dynamic process of the firm's functional upgrading over the period of time. Longitudinal method should be used in the next study. Secondly, another limitation relates to the fact that we did not examine the firm capabilities due to the limitation of time and the difficulty in

getting the answer from CEOs/MDs on this issue. Future research that concentrates on the functional upgrading and export performance of the garment exporters should pay more attention to the firm's capabilities and the relationship between them and functional upgrading and export performance. Finally, our findings were drawn from garment manufacturers in Vietnam. Many developing countries in Asia, Latin America, and Africa have the same position in global apparel value chains like Vietnam. The study is needed to replicate for those countries in order to determine whether these results can be generalized to firms in other developing countries.

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THE SIGNIFICANCE OF THE RESIDENT'S KNOWLEDGE MANAGEMENT IN MANAGING THE RESIDENTIAL PROPERTY[1]

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ABSTRACT
Most commonly, residents are always arguing about the satisfaction of sustainability and quality of their high rise residential property. Often, all the shortcomings and weaknesses will be blamed on the developers without considering the lack of knowledge management from the residents themselves. It is important, therefore, to show that knowledge management of the residents should be taken into account in relation to the satisfactory and the quality of the high rise residential property. This paper aims to discuss the resident's knowledge management level of the high rise residential property in showing that resident's knowledge management is really important to maintain the property at least. To evaluate this situation, the questionnaire surveys are being conducted. The paper analyses and structures the social science research on the importance of knowledge as a resource. The survey evidence demonstrates that, the resident's knowledge management level was highly related in having high quality and sustainable high rise residential property in Johor Bahru.

Keywords: High rise building, Knowledge and information, Knowledge sharing, Residents

1 INTRODUCTION

Many companies throughout the world base their strategies for growth in the generation, transfer and application of new knowledge. Knowledge has been recognized as a source of competitive advantage (Soosay and Hyland, 2008; Goh, 2002; Cohen and Levinthal, 1990). Knowledge as a resource and asset has been one of the major areas of debate in social science research since the last decade of the twentieth century (Love, 1995; McFetridge, 1995; Kogut and Zander, 1995; Athanassiou, 2000; Spencer, 2000; Buckley, 2003). Although international business researchers have analysed successfully the more tangible aspects of knowledge such as technology transfer, innovation and patents, there still remains a more complex issue of precisely how to analyse the transfer and the importance of the more intangible and tacit aspects of knowledge in the twenty-first century. Moreover, knowledge is widely regarded as an instrumental resource when it comes

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to company performance and innovation (Nonaka and Takeuchi, 1995; Beckett et al., 2000; Sveiby, 2001; Dyer and Hatch, 2006). This paper aims to discuss the resident's knowledge management level of the high rise residential property in showing that resident's knowledge management is really important to maintain the property at least.

For years, the property management and construction industries have focused on three primary concerns in the creation of buildings. But for this paper is concerned, only the first one from the three primary concerns will be discussed. The first, of utmost significance to property managers, is the design of a building and the management after the development. Is the building enjoyable to view and occupy? Does the organization of spaces enhance the user's program?. The second concern, the primary focus of contractors and developers, is the construction of a building. How will the building be built? How much will the building cost? The client expects a contractor to be able to construct a sound building for the predicted construction cost (Amaratunga et al., 2002). These are typically the primary concerns of a client when the idea of developing a building is addressed, so it is no surprise that property managers, developers and contractors focus their efforts to this end. These are noteworthy concerns; however they are not the only concerns that should be addressed when planning for the future.

A third concern that is receiving more attention, as building owners investigate the economics of property management, is the cost of building operations over the life of a building (Dunk, 2004). The combination of economic theory and computer technology allows for more sophisticated approach to the design and construction of material component than ever before. Instead of merely looking at the material component in terms of cost to design and build, owners can broaden their perspective to include operations costs, maintenance costs, repair costs, replacement costs, and disposal costs (Dunk, 2004).

1.1 High Rise Residential Property Development in Johor Bahru

Malaysia has achieved a measure of success in its efforts to provide shelter for all in a sustainable urban environment. This was made possible by the joint efforts of all concerned – government, local authorities, financial institutions, the private sector and the target group themselves. By referring to the Malaysia Plan (five yearly programmes beginning with the First Malaysia Plan 1966–1970), both the public and private sectors have intensified their efforts in the implementation of residential development to meet increasing demand (Ho, 1994, Tapsir, 2001). In this regard, Malaysia has made a firm and clear commitment to build needed infrastructure, both social and physical infrastructure. The government of Malaysia recognises residential property as a basic human necessity and an important component of the urban economy. This has led to the formulation of policies and programmes aimed at ensuring that all Malaysians have access to adequate shelter and related activities. In Malaysia, residential property development programmes are carried out by both the public and the private sector (Government of Malaysia, 2010).

According to the residential property stock report (NAPIC, 2010), the total of high rise residential property development in Malaysia is lower than the low rise residential property development by 41%. However, the current demand for high rise residential property development shows that over 42% of development directed to the high rise residential property development (HRRPD), particularly in Johor Bahru, Malaysia. Based on the current census and National Physical Plan

(NPP) by Ministry of Housing and Local Government and Town Planning, Johor Bahru is expected to provide for a population of 1.84 million people by 2020. With limited land areas left, many property managers need to think about providing vertical residential buildings rather than horizontal residential buildings. In terms of residential property development, property managers need to consider in developing high rise residential building compared to low-rise residential building in the future to solve the problem of limited land areas.

This issue has been traced via the statistics given by the Department of Statistic, Malaysia as in Table 1. The drastic increase in the population means that the land areas left are also decreasing constantly. This scenario creates the situation where, HRRPD is needed in Johor. Instead, Table 2 shows the statistics for population distribution in Johor between Urban and Rural area. The figure in this table is intended to provide the details population movement of Johor comparable to the information stated in Table 1. This pattern of increasing urbanisation of the population is expected to continue up to 2020 when it is anticipated at least 75.0% of the peninsular population will reside in urban areas.

Table 1: Distribution of Population ('000) and AAGR (%) for Johor compare to Peninsular Malaysia (General Report of the Population Census, 2005)

YEAR	Peninsular Malaysia			Johor		
	Population Size	Distribution (%)	AAGR(%)	Population Size	Distribution (%)	AAGR(%)
1980	11,426.6	100		1,638.2	14.3	
1991	14,797.6	100	2.38	2,162.4	14.6	2.56
2000	18,523.6	100	2.53	2,740.6	14.8	2.67
2020	268,097.0	100	1.87	40,422.0	15.1	1.96

Based on the needs and changes in the sustainable development in Malaysia, significant improvement was detected especially in regards the high rise residential property development. The findings as shown in Figure 1, obtained that 157.7% of existing stock of high rise residential property building has increased in year 2012 compared to the year 2004, meanwhile, only 49.5% existing stock increased in Malaysia in total. However, this situation was slightly different when incoming supply data were analysed. Survey detected that only 25.7% different for incoming supply of high rise residential property development in Johor between year 2004 and 2012, meanwhile, the percentage shown the significant dropped on the incoming supply of high rise residential property development by a total of -25.6%. Even though this situation occurred, the most important of knowledge management for the residents of the HRRPD should be examined. By identifying this, it can help to prevent any uncertainties of the quality of HRRPD.

2 KNOWLEDGE MANAGEMENT AND SUSTAINABLE

Knowledge can often be talked (Polanyi, 1957; Schelling, 1960) and its value and quality difficult to ascertain even after the exchange. Because its value is often difficult to ascertain and hence often knowledge can be measured only over time and over repeated interactions, knowledge may be more effectively exchanged in more socially embedded relationships. Since

the 1960s, governments around the world have been encouraged to develop the knowledge sector in their management is concerned.

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Table 2: Details Urban- Rural Population ('000), 1991-2020 (General Report of the Population Census, 2005)

District Area	19,210km2	
Density	7,409km2 (18,967 sqm2-1)	
Population Size (Year)	**Urban**	**Rural**
1991	989.91	1,079.83
2000	1,787.5	953.1
2005	2,086.5	933.2
2010	2,320.2	1,008.0
2015	2,579.6	1,088.3
2020	2,868.0	1,175.2

Many reports have been made aggressively which extols the potential of the knowledge management for generating growth (Jarman and Chopra, 2008). Throughout the developed and developing countries, there are being encouraged to pursue similar understanding which embraces a knowledge management and the knowledge economy concept in order to stimulate the best condition of their management process and particularly economic growth.
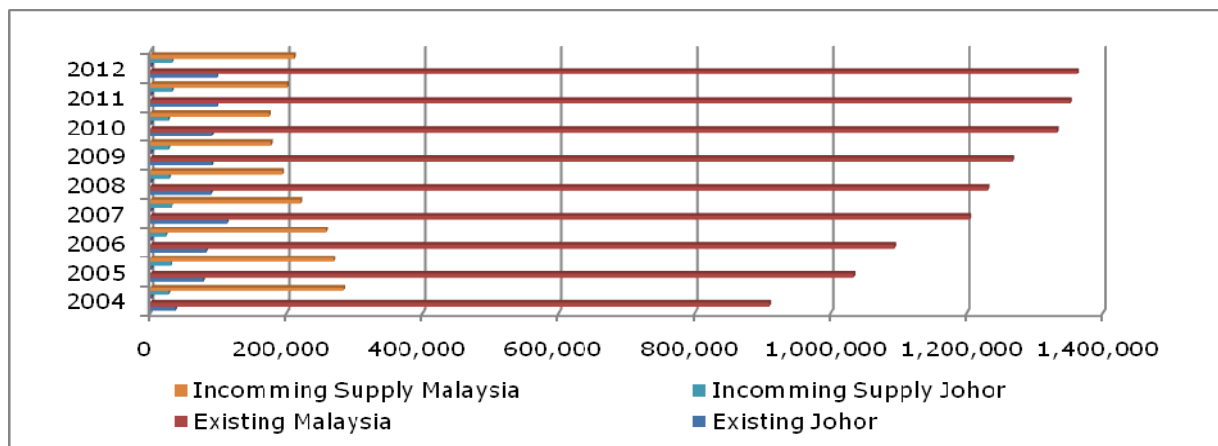
Chart 1: HRRPD Stock Data in Johor compared to Malaysia
(General Report of the Population Census, 2005)

Knowledge management and sustainability has been focused deeply globally nowadays. Over the last decades the importance of knowledge in social science research has been highlighted in various works and focus especially done by Kogut and Zander (1993, 1995). This works have been supported by Eriksson in year 2000, who helped show that multinational enterprises can be seen from an evolutionary rather than a purely transaction cost perspective – raising the complex need to analyse the crucial importance of knowledge in international business research. Krishan Kumar (1995, p. 23) determined that knowledge according to information society theorists, is progressively supposed to affect work in two ways. One is upgrading of the knowledge content of existing work in the sense that the new technology adds rather than subtracts from the skill of workers. The other determination from Kumar (1995) is the creation and expansion of new work

in the knowledge sector such that information workers come to predominate in the economy. Moreover, it is assumed that it is the more skilled, more knowledgeable information workers who will come to constitute the core of the information economy.

3   OUTLINE OF SURVEY

Both quantitative and qualitative methods have been used as a research method to achieve the objective of this research.

Under qualitative methods is concerned, this research is described to determine a theoretical basis and the factors of knowledge management and sustainable involved in performing the evaluation of resident's knowledge management and sustainable level of the high rise residential residents in Johor Bahru. All of the factors have been determined and the standard provision of the technical performance in delivering all the information of the selected high rise residential property is also analysed.

From this method and analysis, a proposed guideline of resident's knowledge management and sustainable level assessment as an evaluation tool is suggested to be used for high rise residential property residents with regards to the effect of quality and sustainability of the high rise residential property building itself in Johor Bahru. Meanwhile, quantitative methods were used to obtain all the survey results and analyses them in appropriate analyses such regression analysis and correlation analysis.

4   RESIDENT'S KNOWLEDGE MANAGEMENT LEVEL

Twenty high rise residential property development buildings in Johor are chosen randomly for the case studies, whereby the important focus group involved is the resident respectively. 700 sets of questionnaires were distributed to the twenty high rise residential property development buildings and 425 sets were received for analysis. The authors personally distributed to the questionnaires to the respondents' and selected for follow up personally face-to-face survey for the late respondents. Sets of questionnaire with structured questions were distributed to the respective building residents to discover their knowledge on the management of their own high rise residential property development buildings. The analysis of data from the questionnaire responses provide precise data from which tables and graphs are produced.

From the case studies, fourteen (14) elements have been determined and the perspective of the residents was analysed. Table 3 shows the element that has been used in examining the residents' knowledge management level. Basically, residents with age under 25 were excluded in this research because majority of them still under college and university and not having any experiences in managing the high rise residential property building at their place. Table 4 shows that most of the residents that have knowledge on the management of their HRRPD building comes from the age of 31-35 years old with 45.9% while the residents at the age of 26-30 years old only have an average of the knowledge on the management of their HRRPD.

Table 3: Elements of Questionnaire Survey

Element	Details
D1	Knowledge on Management
D2	Gender
D3	Age
D4	Residential
D5	Factors
D6	Price
D7	Building
D8	Community
D9	Decision
D10	Materials
D11	Emergency
D12	Safety
D13	Without Knowledge on Management
D14	Sector

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Table 4: Validation on Residents Knowledge based on Age

			Age				
			26-30	31-35	36-40	40-above	Total
D1	Yes	Count	15a	112a, b	81b	36a, b	244
		Expected Count	23.5	113.1	68.3	39.0	244.0
		% within D1	6.1%	45.9%	33.2%	14.8%	100.0%
		% within D3	36.6%	56.9%	68.1%	52.9%	57.4%
		% of Total	3.5%	26.4%	19.1%	8.5%	57.4%
		Residual	-8.5	-1.1	12.7	-3.0	
		Std. Residual	-1.8	-.1	1.5	-.5	
		Adjusted Residual	-2.8	-.2	2.8	-.8	
	Average	Count	26a	85a, b	38b	32a, b	181
		Expected Count	17.5	83.9	50.7	29.0	181.0
		% within D1	14.4%	47.0%	21.0%	17.7%	100.0%
		% within D3	63.4%	43.1%	31.9%	47.1%	42.6%
		% of Total	6.1%	20.0%	8.9%	7.5%	42.6%
		Residual	8.5	1.1	-12.7	3.0	
		Std. Residual	2.0	.1	-1.8	.6	
		Adjusted Residual	2.8	.2	-2.8	.8	
Total		Count	41	197	119	68	425
		Expected Count	41.0	197.0	119.0	68.0	425.0
		% within D1	9.6%	46.4%	28.0%	16.0%	100.0%
		% within D3	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	9.6%	46.4%	28.0%	16.0%	100.0%

Each subscript letter denotes a subset of Age categories whose column proportions do not differ significantly from each other at the .05 levels.

Besides that, Table 5 has shown the degree of linear relationship between the elements through Pearson Product-Moment Correlation Coefficient (r). It was found that the level of the knowledge on management of the residents in Johor Bahru HRRPD was above 50% which they were well known of their high rise residential property development especially residents of the age 31-35 years old. In overall, all elements of knowledge management level of the residents in HRRPD in Johor correlate and validated for this study.

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Table 5: Correlations from the factors that have been selected

		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14
Pearson Correlation	D1	1.00	-.19	-.08	-.03	-.12	.03	.01	.07	.10	.08	-.03	-.04	.05	-.10
	D2	-.19	1.00	-.05	-.07	.02	-.14	-.02	.10	.02	.05	.04	.01	-.09	.19
	D3	-.08	-.05	1.00	-.14	.17	-.07	.08	-.09	.12	.06	.14	.19	.08	.05
	D4	-.03	-.07	-.14	1.0	.24	-.20	-.02	.14	-.12	.12	-.03	.01	.06	-.11
	D5	-.12	.02	.17	.24	1.00	-.02	.06	.17	-.06	-.02	.00	-.04	.08	-.121
	D6	.03	-.14	-.07	-.20	-.02	1.00	-.02	.04	-.03	-.09	.08	-.18	-.00	-.07
	D7	.01	-.02	.08	-.02	.06	-.02	1.00	.01	.11	-.03	-.05	.09	.04	-.12
	D8	.07	.10	-.09	.14	.17	.04	.01	1.00	.06	-.01	.03	-.08	.11	-.04
	D9	.10	.02	.12	-.12	-.06	-.03	.11	.06	1.00	.08	.01	.01	.14	.12
	D10	.08	.05	.06	.12	-.02	-.09	-.03	-.01	.08	1.00	.05	.09	-.09	-.08
	D11	-.03	.04	.14	-.03	.00	.08	-.05	.03	.01	.05	1.00	.09	.10	.12
	D12	-.04	.01	.19	.01	-.04	-.18	.09	-.08	.01	.09	.09	1.00	.02	-.02
	D13	.05	-.09	.08	.06	.08	-.00	.04	.11	.14	-.09	.10	.02	1.00	.03
	D14	-.10	.19	.05	-.11	-.12	-.07	-.12	-.04	.12	-.08	.12	-.02	.03	1.00
Sig. (1-tailed)	D1	.	.00	.04	.27	.00	.24	.41	.06	.01	.03	.27	.19	.13	.01
	D2	.00	.	.12	.05	.31	.00	.33	.01	.34	.14	.15	.36	.02	.00
	D3	.04	.12	.	.00	.00	.05	.04	.02	.00	.07	.00	.00	.03	.13
	D4	.27	.05	.00	.	.00	.00	.33	.00	.00	.00	.24	.36	.07	.01
	D5	.00	.31	.00	.00	.	.30	.09	.00	.08	.33	.44	.16	.04	.00
	D6	.24	.00	.05	.00	.30	.	.33	.17	.22	.02	.04	.00	.48	.07
	D7	.41	.33	.04	.33	.09	.33	.	.35	.00	.23	.12	.02	.20	.00
	D8	.06	.01	.02	.00	.00	.17	.35	.	.08	.40	.22	.04	.01	.17
	D9	.01	.34	.00	.00	.08	.22	.00	.08	.	.04	.36	.40	.00	.00
	D10	.03	.14	.07	.00	.33	.02	.23	.40	.04	.	.11	.03	.02	.03
	D11	.27	.15	.00	.24	.44	.04	.12	.22	.36	.11	.	.03	.02	.00
	D12	.19	.36	.00	.36	.16	.00	.02	.04	.40	.03	.03	.	.32	.30
	D13	.13	.02	.03	.07	.04	.48	.20	.01	.00	.02	.02	.32	.	.24
	D14	.01	.00	.13	.01	.00	.07	.00	.17	.00	.03	.00	.30	.24	.

5   CONCLUSION

The result presented above among the significant findings analysed but do not represent the entire findings of this study. In general, there is a minor discrepancy in priority order between the residents' age and cultural issues. It is strongly believed that this is due to different dimensions of importance viewed by this age group based on their experience.

While we accept that this is necessarily surface information about what are deeply controversial issues, it is evident from this exploration that there is much work to be done with regard to property business adoption and developer management is concerned in providing high quality and sustainable residential property. It is interesting that usually all the blamed in the case of sustaining the property quality goes to the developers, while at the bottom is essentially a lack of knowledge management of the residents that influence the actual condition of the high rise

residential property quality and sustainability. Creating and sustaining corporate values are a crucial requirement for effective knowledge management for HRRPD residents. In order for an organization to utilize knowledge of their assets and get the maximum value from their assets on HRRPD, knowledge of the residents themselves must move smoothly throughout organizations.

As recommended, it is strongly advised that, all decision making in overcoming the quality satisfaction issues on HRRPD buildings raised by the residents should be taken into account in the future.

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KNOWLEDGE MANAGEMENT LIKE A KEY ELEMENT IN OECD COUNTRIES

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ABSTRACT

At present time, we are involved in the knowledge economy era where the knowledge is a fundamental tool in order to obtain competitive advantages. However, although this point has been studied in enterprises since 90 decade, the importance of knowledge management in the case of countries has being discovered the last years. In this sense, researches focus in this topic are essentials in order to promote countries development through a knowledge management strategy. This paper present an interesting analysis about how do OECD countries manage their knowledge using variables related with this process. These variables are linked with knowledge investment, description of countries and knowledge results, all of them extracted in World Bank database and focusing our research in the year 2009. Analyzing the variables with factor analysis technique, we identify four highlight factors in this process: (1) Investment and results, (2) Trade ICT goods, (3) Education and creativity and (4) The power of intangibles. All of them can help to governments interested in the improvement of their situation in the global ranking. We structure the paper like follows: first, a short introduction about the opportunity of this research. Second, we present a bibliographic review about knowledge management in countries analyzing the highlight at present. In the next section we present the methodology used, the data base and the variables of the analysis. Then, we show the results and we present the principal findings of the research derived these results. And finally, we present the conclusion, practical implications, limitations and future researches..

Keywords: *Factor analysis, Knowledge economy, Knowledge management, OECD countries*

1 INTRODUCTION

In the new knowledge economy (Sakaiya, 1991), knowledge is presented like an essential font of competitive advantages in organisations (Nonaka and Takeuchi, 1995; Davenport and Prusak, 2000; Itzkin, 2000; Sharratt and Usoro, 2003; Paswan and Wittmann, 2009; Ajmal, Helo and Kekale, 2010). In this way, countries should manage knowledge present in big and small enteprises and, if it is not captured, it will lose (Fletcher and Polychronakis, 2007).

At present time, society is linked with globalization, and an interesting globalization characteristic is the knowledge highlight. This highlight includes on one hand the backing on technological activities and, on the other hand, essential intangible actives like for example training, software or commercial expenses (Delapierre, 1995). In this way, knowledge

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management is the response to the new society entitled knoledge society where knowledge production (and its using) is the basic pillar (Drucker, 1993; Morrow, 2001; Passerini, 2007; Kebede, 2010). However, alghouth with this discover the publications about knowledge management in enterprises have been increased (Kebede, 2010), there is not many publications about how countries manage their knowledge.

In this scenario, we present an interesting empirical study about knowledge management in OECD (Organisation for Economic Co-operation and Development) countries identifying the most important factors for this process. These factors can help to governments interested in improve their situation in the global ranking focusing their efforts in knowledge value.

OECD countries was founded in 1947 to run the Marshall Plan for reconstruction of a continent ravaged by war. It is composed by 34 member countries span the globe, from North and South America to Europe and the Asia-Pacific region, and it includes also most advanced countries like emerging countries. At present time, the mission of the organisation is to promote policies that will improve the economic and social well-being of people around the world (About the OECD, 2012).

There is not a commonly acepted definition of knowledge management (Hlupic, Pouloudi and Rzevski, 2002). In this sense, authors identify Kebede´s definition like complete and interesting, who defines the concept like a systematic knowledge management and the process and tools associated with it with the aim to exploit its potential and it support decision making process faciliting innovation and creativity, and obtaining a competitive advantage (Kebede, 2010).

From this definition, we expose the relationship between knowledge and other concepts linked with them and exposed by Kebede: Innovation and creativity (research) and process and tools (technological activity). In addition, we analyze an interesting question: education like base of knowledge. In the following subsections, we highlight these relationships from contributions by authors previously.

1.1   Creativity and knowledge: knowledge workers

People are very important in knowledge management, because knowledge is considered like a human capacity (Nonaka and Takeuchi, 1995; Wiig, 1997; Jimes and Lucardie, 2003; Lindner and Wald, 2010). Therefore knowledge is in people´s brain (Sharrat and Usoro, 2003) and knowlege creation is undestood like a process possessed by workers and instrumented in knowledge network in organization. Then Knowledge workers are one of the most important active in enterprises (Drucker, 1991; Zhou, Siu and Wang, 2010). If we move this conclusion to country management, population trained and with habilities is essential in oder to an efficient creation, adquisition and use of knowledge, and it is linked with increase productivity and economy growth (Chen and Dahlman, 2004).

People create, share and use knowledge, and in this sense, there is an essential group: researchers. Studies like published by Adams (1990), who linked the number of scientific articles in a society with productivity growth in American manufacturing sector during the since 1953 until 1980, highlight the importance of researchers and economic development.

Hence creativity is essential to innovation activity and country´s growth (Lee and Choi, 2008), therefore to include researchers and knowledge workers in economic growth models is

essential to research and development (R+D) activity (Raspe and Van Oort, 2006). Moreover in a society like present where creativity and innovation are globalized, a more creative workforce are necessary for the competitiveness (Business Council of Australia, 2006; Oakley, 2007). In this way, stock of ideas is proportional to research effort (Jones, 2002).

Invest in R+D is necessary in order to create new knowledge (Kogut and Zander, 1992; Henderson and Cockburn, 1994; Fleming, 2001; Lindstrom and Heshmati, 2005), and also it is linked with economy growth (Guellec and van Potterlsverghe, 2001; Lederman and Maloney, 2003). In this way, investments associates with new products, new process and knowledge development have a positive impact in GDP (gross domestic product) growth (Davidsson and Segerstrom, 1998; European Comission, 2007).

1.2   Technological activity like knowledge motorway

Some studies show that information and communication technology is an important motor in innovation activity (Polder, Leeuwen, Mohnen and Raymond, 2009). Thus ICT investment is used to process and organize work within organizations (Greenan, Topiol-Bansaid and Mairesse, 2001). In this sense, an intensive use of ICT reduce efforts in research and development (R+D) activity (Cerquera and Klein, 2008), therefore there is a complementarity between both activities (Polder, Leeuwen, Mohnen and Raymond, 2009).

Hendriks (1999) identifies ICT to reduce barriers in knowledge sharing process, facilitate the acces to information bases storing data, improve the processes involved in this process, and may help locate the various elements relevant to knowledge sharing. As consequently, the relationship between ICT and productivity of the organizations is positive (Bresnahan, 2002; Castiglioni, 2009).

1.3   The base of knowledge: Education

Education is the base of knowledge, therefore it is linked with knowledge management. First, primmary education is necessary in order to increase people capacity to learn and use information. Second, secundary and university levels provides the base in order to create innovation and new knowledge (Chen and Dahlman, 2004). In this sense, Universities has a fundamental function in knowledge workers connectivity (Martinez-Fernandez, Rerceretnam and Sharpe, 2007) and present studies show that high education levels are related to increase innovation activity and industrial activities in regions (Goddard, 2007).

In addition, there is a relationship between a population with high education level and technology used in a country. In general, these people will be more sensible to avanzed products quality and they estimulate to local enterprises to innovate and design technological products (Chen and Dahlman, 2004).

2   METHODOLOGY

2.1   Data source

Data for this study were drawn from World Bank database and access was realized in September and October 2012 on the website http://data.worldbank.org/. In this sense, our work includess all the OECD countries and the year of analysis is 2009 thus is the year wchich there are fewer missing data, so we have selected it for our study in order to obtain more conclusions about the countries.

2.2 Description of variables

The variables (see Appendix 1 for more information) have beem classified into the following categories: (1) country description, (2) investment and (3) performance (see Table 1). All of them are related directly or indirectly with knowledge within the countries and its importance has been expose in previous section (1 Introduction).

Table 1: Variables classification

Country Description	Investment Variable	Performance Variable
Researchers	R+D expenditure	Patents
Technicians	Education expenditure	GDP per capita
High tech exports		New businesses
ICT goods exports		Articles
ICT goods imports		
ICT services exports		
Royalties, payments		
Royalties, receipts		

2.3 Research method

In this paper, we use an exploratory factor analysis technique whose aim is to represent a group of variables in terms of a smaller number of underlying factors (Kim and Mueller, 1994), thus this statistical technique identify factors reflecting what variables share in common (Hair, Anderson, Tatham and Black, 1995). Specifically we use principal component analysis (PCA) with Varimax rotation. In this way, Hair, Anderson, Tatham and Black (1995, p. 380) recommend rotation because it *"simplifies the factor structure and usually results in more meaningful factors"*.

3 RESULTS AND DISCUSSION

Using factor analysis technique and rotated component matrix, we identify four highlight factors in knowledge management process linked with OECD countries (see Table 2). These factors explain around 75 per cent of data variability (see Table 3) and following Hair, Anderson, Tatham and Black (1995) a solution that explains more than 60 per cent of the variance is considered satisfactory, thus our study is considered satisfactory. The highlight factors are: (1) Investment and results, (2) Trade ICT goods, (3) Education and creativity and (4) The power of intangibles.

3.1 Investment and results

First factor, called *Investment and results*, explains around 25 per cent of data variability and includes the following variables: research and development (R+D) expenditure, researchers, patents, high technology exports, technicians and GDP per capita. In this sense, this factor highlight the importance about the relationship between invest and results variables and it is in accordance with studies like for example Sarabia, Obeso and Sarabia (2012). R+D expenditure is related to some some description variables as the number of researchers and technicians, and high technology exports. In addition, there is a relationship between R+D investment, patents (the result of investigation) and GDP per capita, following studies like Solow (1957) or Romer (1990), who explains that technical progress is a major source of productivity.

3.2 Trade ICT goods

Second factor, entitled *Trade ICT goods,* explains around 20 per cent of the variance and it is composed by ICT goods imports and ICT goods exports and it is the second most important

factor. This result highlight the importance of ICT technologies in knowledge management in countries, and it is in line with studies like Hendriks (1999) or Bresnahan (2002).

3.3 Education and creativity

Third factor is called *Education and creativity,* and it explains around 16 per cent of data variability. This factor is very interesting because it identies the relationship between education and two important result variables: new businesses and articles. These result variables are linked with prople creativity and following Kerr and Lloyd (2008, p. 488): *"Oakly (2007) (...) emphasises the need to develop communication, leadership, entrepreneurship, team work, creative skills, cross-cultural understanding, problem solving, emotional intelligence and right-brain stuff. Further, a focus by economic policy makers across the world on things `creative´is driven by factors such as crative inputs in innovation policy."*

Table 2: Rotated component matrix

Variables	Component			
	1	2	3	4
R+D expenditure	**,862**	-	,192	-
Researchers	**,763**	-,162	,443	-
Patents	**,668**	,353	-,355	-,321
High tech exports	**,611**	,453	,268	,146
Technicians	**,579**	-,520	,234	,204
GDP per capita	**,570**	-,549	-	,445
ICT goods exports	-	**,903**	-,198	,122
ICT goods imports	-	**,865**	-	,177
Education expenditure	,288	-	**,814**	-
New businesses	-	-,120	**,691**	-
Articles	,571	-,232	**,619**	,195
Royalties, payments	-	,128	-	**,800**
ICT services exports	-	,243	,276	**,788**
Royalties, receipts	,466	-,268	-,231	**,647**

The coefficients less than 0.1 have been removed.

Table 3: Total variance explained

Component		Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %
Factor	1	3,442	24,586	24,586
	2	2,711	19,362	43,948
	3	2,187	15,622	59,570
	4	2,146	15,329	74,899

Extraction Method: Principal Component Analysis

3.4 The power of intangibles

And finally, fourth factor is called *The power of intangibles.* It explains around 15 per cent of the variance and it includes the following variables: royalties (payments and receipts) and ICT services exports. This factor explains the highlight of payments and receipts between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and propietary rights such as patents, copyrights, trademarks, industrial processes and franchises.

3.5 Discussion

We identify four interesting factors in knowledge management in OECD countries. The most important factor is *Investment and result*, where includes the relationship between investment and results variables. Then, the second is ICT technologies, thus we exposes the highlight of this tools in the process. Factors 3 and 4 are also interesting but less than factors 1 and 2, so education and intangibles like royalties are less important than others. Therefore, from this information, countries should focus their efforts in investment variables and ICT questions prioritizing these aspects on education and intangibles trademark.

4 CONSLUSION

Following studies like for example Sarabia, Obeso and Sarabia (2012), we identify the highlight factors in knowledge management in an interesting group of countries like OECD. In this sense, there are four factors that governments in OECD countries focus their knowledge management: *Investment and results*, *Trade ICT goods*, *Education and creativity* and *The power of intangibles*, being the first factor *Investment and result* the most important.

This study is very interesting for OECD countries, because it analyzes how these governments manage their knowledge identifying where they focus their efforts in this process. Thus, this research is the first step (what they do) in knowledge management strategy. In this way, we propose new lines of researches, where the analysis about what OECD countries manage their knowledge better than others would be very interesting.

This study also can help other countries that do not belong to OECD organizationand they could use this analysis as a reference for their knowledge management strategy.

Finally, this analysis is also interesting to academicians focused on knowledge management, because it supposes a different point of view in the area (analyzing countries rather than enterprises).

In the end, we identify some limitations in the study. First, how World Bank extracted data, because we have not information about the process as a consequence we do not know if it has been realized it correctly. And second, the analysis is only about the year 2009, thus we obtain a static vision; in this sense, in future researches it could be interesting replicate the analysis in more years and compare the evolution.

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Appendix 1: Variables and definitions (extracted by World Bank Database)

GDP growth (annual %): Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2000 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

GDP per capita (current US$): gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars.

High-technology exports (% of manufactured exports): products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery.

ICT goods exports and imports (% of total goods exports and imports): they include telecommunications, audio and video, computer and related equipment; electronic components; and other information and communication technology goods. Software is excluded.

ICT service exports (% of service exports, BoP): include computer and communications services (telecommunications and postal and courier services) and information services (computer data and news-related service transactions).

New businesses registered (per million people): New businesses registered are the number of new limited liability corporations registered in the calendar year.

Patent applications, residents (per million people): Patent applications are worldwide patent applications filed through the Patent Cooperation Treaty procedure or with a national patent office for exclusive rights for an invention--a product or process that provides a new way of doing something or offers a new technical solution to a problem. A patent provides protection for the invention to the owner of the patent for a limited period, generally 20 years.

Public spending on education, total (% of GDP): Public expenditure on education as % of GDP is the total public expenditure (current and capital) on education expressed as a percentage of the Gross Domestic Product (GDP) in a given year. Public expenditure on education includes government spending on educational institutions (both public and private), education administration, and transfers/subsidies for private entities (students/households and other privates entities).

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Research and development expenditure (% of GDP): Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development.

Researchers in R&D (per million people): Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 level 6) engaged in R&D are included.

Royalty and license fees, payments and receipts (BoP, current US$): they are payments and receipts between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts). Data are in current U.S. dollars.

Scientific and technical journal articles (per million people): Scientific and technical journal articles refer to the number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences.

Technicians in R&D (per million people): they are people whose main tasks require technical knowledge and experience in engineering, physical and life sciences (technicians), or social sciences and humanities (equivalent staff). They participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods, normally under the supervision of researchers.

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TURKEY'S CONVERGENCE TO THE EU: CATCHING UP OR FALLING BEHIND?

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ABSTRACT
In this study, convergence between Turkey and the EU has been examined by using time series econometrics in the context of per capita incomes. Firstly stochastic convergence has been summarized. Then, it has been investigated whether Turkey is catching up the EU or not. Both average incomes of the EU13 and individual income of each country in the EU13 have been considered in order to analysis Turkey's convergence process to the EU for the period 1950-2010. According to results, there have no strong convergence tendency in the income differences of Turkey EU13. Turkey is catching up only a country while falling behind of EU13 average and other twelve countries. These results indicate that Turkey must have better economic performance in the process of economic integration in order to catch up living standards of the EU.

Keywords: Catching up, Convergence Hypothesis, Turkey and European Union

1 INTRODUCTION

Turkey has been trying to join the European Union (EU) since the first full membership application in 1959. After more complicated circumstances, Customs Union actualized in 1996 can be seen an important step in this process. In 2004, Turkey was recognized as a nominee state and open-ended negotiations for full membership started on October 13, 2005. Although Turkey has fulfilled Copenhagen Criteria in many aspects, it has confronted many difficulties in fulfilling Maastricht Criteria that will be necessary for monetary union. In other words, apart from socio-cultural differences, integration of Turkey into economy of the EU includes various difficulties. In this sense, in the study it has been investigated whether Turkey, as a nominee state, has convergence towards the EU in the context of per capita incomes. In other words, Turkey's catching up or falling behind the EU and specific countries in the Union was examined by using time series method with special reference to convergence hypothesis.

2 STOCHASTIC CONVERGENCE: A BRIEFLY REVIEW

Neo-Classical Solow (1956) model suggests that growth rate would decrease as long as capital increases because of the law of diminishing returns. When this hypothesis is considered among countries, it is expected that developing countries would present high growth rates than developed economies and catch up in the context of per capita incomes. Catching up (a country is getting close to a leading country, which mentioned by

Gerschenkron in 1958 and discussed by Abramowitz in 1986) and convergence (income differences between countries will decrease in long run, which introduced by Baumol in 1986 and formulized by Barro and Sala-i Martin in 1992) have been popular issues in the growth literature in recent years because these discussions are also about of the validity of traditional neo-classical growth models (Solow, 1956; Swan, 1956) and New Endogenous Growth Models (Romer, 1986; Lucas, 1988).

Convergence and catch-up hypothesis are generally tested with cross section studies (Baumol, 1986; Barro and Sala-i-Martin, 1992), time series methods (Carlino and Mills, 1996; Bernard and Durlauf, 1995), distribution dynamics (Quah, 1993) and panel data analyses (Islam, 1995; Bond et al., 2012). However due to criticism towards cross-section analyses, panel data and time series methods have been usually preferred for testing convergence hypothesis by researchers in recent years (Islam, 2003).

Table 1: A Survey of Selected Studies on Stochastic Convergence

Author (s)	Period	Countries	Methods	Conclusions
Bernard and Durlauf (1995)	1900-1987	15 OECD Countries	Co-integration	Divergence
Oxley and Greasley (1995)	1892-1992	Australia, US, and UK.	ADF Structural Break	Catch-up
Li and Pappel (1999)	1900-1989	16 OECD Countries	ADF Structural Break	Convergence
Li (1999)	1960-1992	113 Countries	ADF, KPSS	Convergence
Tsionas (2000)	1960-1997	15 European Countries	ADF, KPSS, PP.	Divergence
Freeman and Yerger (2001)	1950-1998	8 OECD Countries	ADF Co-integration	Divergence
Nahar and Inder (2002)	1950-1998	22 OECD Countries	Average Trend ADF	Convergence
Datta (2003)	1950-1998	15 OECD Countries	Kalman Filter	Convergence
Cunoda et al. (2004)	1903-1999	US, Japan and Taiwan	Fractionally Integration	Convergence
Strazicich, Lee and Day (2004)	1870-1994	15 OECD Countries	LM + Structural Breaks	Convergence
Harvey and Carvalho (2005)	1950-1997	11 European Countries	Structural Time Series Analysis	Convergence Clubs
Lee, Lim and Azali (2005)	1960-1997	5 ASEAN Countries	ADF Structural Break	Divergence
Sanz-Villarroya (2005)	1875-2000	Argentina, Australia, Canada	ADF Structural Break	Divergence
Wang (2007)	1972-2000	OECD, China, Taiwan	ADF, PP, KPSS Co-integration	Divergence
Chong et al. (2008)	1950-2000	12 OECD Countries	KSS	Convergence
Liew and Ahmad (2009)	1950-2000	Nordic Countries	KSS	Convergence
Canarella et al. (2011)	2001:01-2010:12	12 European Countries	ADF LM KSS	Convergence
Ayala, Cunado and Gil-Alana (2013)	1950-2011	US and 17 Latin America Countries	ADF, LS	Convergence

ADF: Augmented Dickey-Fuller; LM: Lagrange Multipler, KPSS: Kwiatkowski, Phillips, Schmidt, and Shin; PP: Phillips-Perron; LS, Lee-Strazicich, KSS: Kapetanios, Shin, Snell.

Testing convergence hypothesis by using time series econometrics started with classical unit root tests and then it has been developed other approaches such as considering possible breaks in trend (Oxley and Greasley, 1995; Carlino and Mills, 1996) and non-linear unit root tests (Chong et al., 2008). Similarly, while Lee et al. (1997) developing definition of stochastic convergence, Bernard and Durlauf (1995) discussed the convergence in the frame of co-integration relationships. On the other words, there are several methods for testing convergence hypothesis in the literature, i.e. structural time series model (Harvey and Carvalho, 2005), Kalman Filter Method (Datta, 2003) and average trend approach (Nahar and Inder, 2002) and so on. A literature survey for these studies was presented in Table 1.

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It can be seen that studies in Table 1 started with ADF unit root test and shifted towards non-linear unit root tests and different test that consider structural breaks in series. It is quite difficult to deduce from study results that there is a clear convergence or divergence between countries. Anyway, common finding of studies upon developed countries such as OECD countries favors convergence. However many studies about developing countries rather point out divergence issues.

3 METHODOLOGY

There are various definitions of convergence and catching up process in the sense of time series in economic growth literature as mentioned above. In this study Carlino and Mills (1996) approach was used. Let show per capita incomes of first country and second country in t period y_{1t} and y_{2t} respectively and say $x_t = \log y_{1t} - \log y_{2t}$. According to Carlino and Mills (1996, p. 573), there should be satisfied two conditions in order to convergence: (a) x_t must be have a mean reverting process, i.e. d<1. (b) x_t must decrease over time, i.e. $\lim_{k \to \infty} E(x_{t+k} / I_t) = 0$. Where I_t is the information set in period t.

If the unit root hypothesis is rejected for the first condition, the following regression is employed to test for β-convergence or catch up (Ayala, Cunado and Gil-Alana, 2013, p. 3222):

$$x_t = \mu + \beta t + u_t \tag{1}$$

Where x_t is the income differences in logarithmic form ($x_t = \log y_{1t} - \log y_{2t}$), μ is the constant, t is the trend, and u_t is the error term. Following conclusions can be derived depending on signs of the estimated parameters (Ayala, Cunado and Gil-Alana, 2013, p. 3222):

1) *β-convergence*: μ and β have opposite signs and statistically significant ($\mu \neq 0, \beta \neq 0$).
2) *Divergence from different levels*: μ and β have the same sign and statistically significant ($\mu \neq 0, \beta \neq 0$).
3) *Constant at different levels*: μ is statistically significant but β is not ($\mu \neq 0, \beta = 0$).
4) *Divergence from the same level*: μ is statistically insignificant but β is not ($\mu = 0, \beta \neq 0$).
5) Constant at the same level: μ and β are both statistically insignificant ($\mu = 0, \beta = 0$).

In other words, that the income differences do not include unit root only points out that shocks are temporary. Augmented Dickey-Fuller test can be employed in order to determine this condition. However; in order to determine whether difference between countries have closed or widened, signs of constant and trend and their statistical meaning should be considered.

4 DATA

Data required for analysis was obtained from Penn World Tables for the 1950–2010 periods (Heston et al., 2012). PWT was preferred since data was corrected according to purchasing power parity and widely used in international studies. On the other hand, there is no past information about countries that have been member of the EU recently. Similarly, there is no reliable information for Germany as well. In order to prevent excessive values, small countries such as Luxemburg and Malta were not included within analysis. For these reasons,

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only 13 states out of 27 stated which are EU members were considered. These countries stated as EU13 are Belgium, The Netherlands, France, Italy, Denmark, United Kingdom, Ireland, Greece, Portugal, Spain, Austria, Finland, and Sweden.

5   EMPIRICAL RESULTS

In order to observe process of income differences among Turkey and EU, income differences in in logarithmic form were shown in Graphic 1. Apart from the income difference among Turkey and other 13 EU member states, income differences among related countries were considered as well. As it can be seen from the graphic, income difference among Turkey and EU13 (and related countries) constantly increased until the middle of 1970's. However this trend paused in 1970's and income difference per capita began closure trend. It can be said that performance of Turkey in recent years is as effective as financial crisis of the EU in these results.
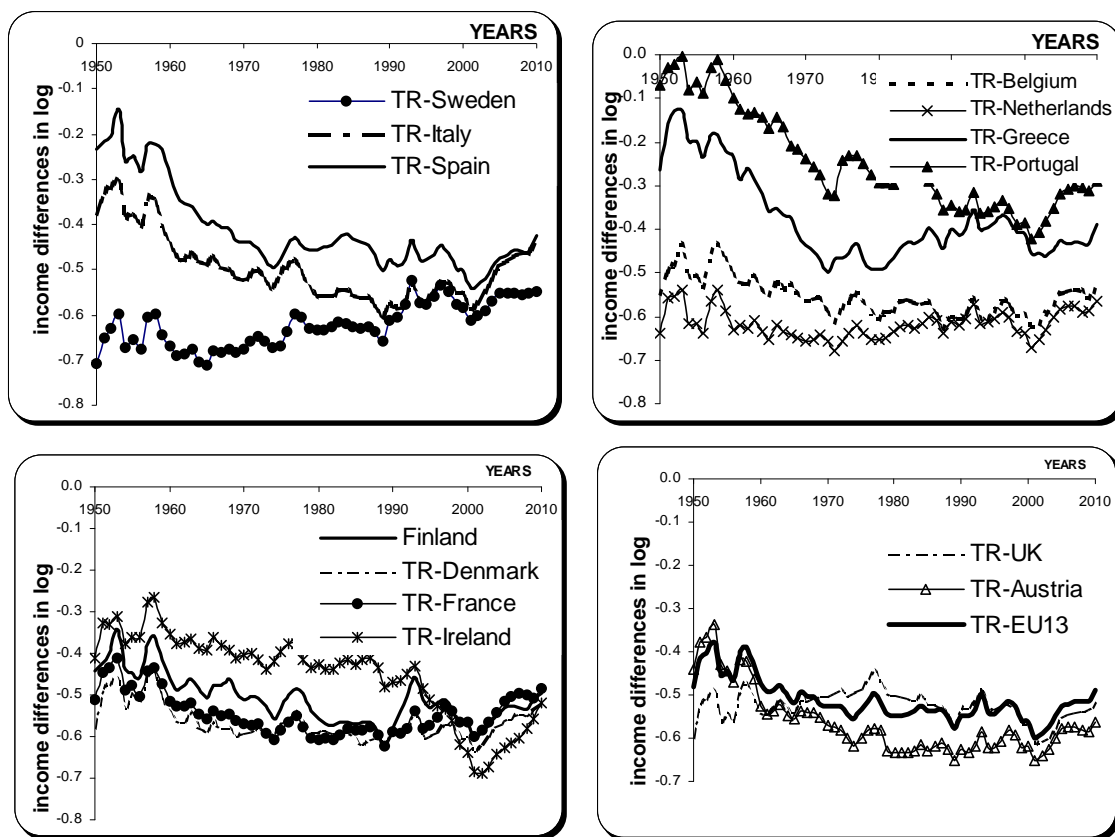
Figure 1: Income Differences in Logarithmic form among Turkey and EU13, 1950–2010

In order to determine whether there is a convergence among Turkey and EU13, income differences per capita in logarithmic form were applied constant and trend ADF unit root test and results were shown in Table 2. First of all, income average per capita of Turkey and 13 EU member countries were considered, and then income difference among related countries were discussed one by one.

Table 2: ADF Results (Constant and Trend Model)

Countries	k*	τ_τ	*Prob.*	Conclusion
TR-EU13	0	-2.48	0.33	Divergence
TR-Belgium	0	-2.88	0.17	Divergence
TR-Netherlands	**0**	**-3.15**	**0.10**	**...**
TR-France	0	-1.52	0.81	Divergence
TR-Italy	0	-0.76	0.96	Divergence
TR-Denmark	0	-2.71	0.23	Divergence
TR-UK	**0**	**-3.93**	**0.01**	**...**
TR-Ireland	1	-2.28	0.43	Divergence
TR-Greece	0	-1.21	0.89	Divergence
TR-Portugal	0	-1.38	0.85	Divergence
TR-Spain	0	-1.39	0.85	Divergence
TR-Avustria	0	-1.48	0.82	Divergence
TR-Finland	**1**	**-3.18**	**0.09**	**...**
TR-Sweden	**1**	**-3.51**	**0.04**	**...**

* Lags have been chosen by considering Schwarz Information Criteria (SIC).

As it can be seen in Table 2, there is no convergence or catching up among Turkey and EU13. According to results, there is no unit root in income differences of only four countries (Netherlands, UK, Finland and Sweden) out of 13. In other words, shocks left no permanent affects in income differences among Turkey and these countries. On the other hand, unit root hypothesis failed to rejected for EU13 and the other nine countries. It can be said that Turkey is falling behind EU and other nine countries. However these results are not sufficient to determine whether there is catching up among Turkey and four countries that have no unit root in income differences. As it is mentioned in method section; checking unit root is not sufficient to determine whether the difference among countries has decreased or not. For this reason, equation no (1) was estimated for all country couples and results were presented in Table 3.

Table 3: Estimation Results

Income Differences	μ	*Prob.*	β	*Prob.*	States	Conclusions
TR-Netherlands	-0.6201 (0.0082)*	0.00	(-0.00007) (0.00023)	0.75	$\mu \neq 0, \beta = 0$	Constant at different levels
TR-UK	-0.5069 (0.0083)	0.00	-0.0006 (0.0002)	0.01	$\mu \neq 0, \beta \neq 0$	Divergence from different levels
TR-Finland	-0.4385 (0.0110))	0.00	-0.0023 (0.0003)	0.00	$\mu \neq 0, \beta \neq 0$	Divergence from different levels
TR-Sweden	-0.6872 (0.0079)	0.00	0.0021 (0.0002)	0.00	$\mu \neq 0, \beta \neq 0$	Catch up

* Standard errors are in the parenthesis.

Results in Table 3 can be interpreted as such: (a) There is a constant per capita income difference between Turkey and Netherlands and this difference does not change in time proportionately. (b)There is a specific income difference per capita among UK and Finland and Turkey and this difference increases in time proportionately. In other words, Turkey is falling behind of the both countries, UK and Finland. (c) On the other hand, income

difference between Turkey and Sweden is decreasing and Turkey is catching up this country in the terms of per capita income.

6   CONCLUSION

According to the results, there is no convergence tendency between Turkey and EU. Only a catch up process (between Turkey and Sweden) has been determined among 13 countries representing EU. Furthermore, it was observed that income differences gradually have increased from 1950's to the middle of the 1970's, but gone straight in the 1980's and then had a tendency to diminish in the 2000's. These cyclical changes indicate that structural breaks or nonlinear cases in series must be considered for next studies. Nevertheless, these results point out the fact that Turkey should have higher growth rates and better economic performance as a nominee state. Similarly, this study draws attention to the necessity that Turkey has to meet its economical span with the EU in addition to political and legal requirements.

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IMPACT OF BOLSA FAMILIA PROGRAM UPON CHILD LABOR IN BRAZIL IN 2006

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ABSTRACT
The phenomenon of poverty is responsible for the insertion of many children in the labor market as a way to ensure the sustenance and survival of the family. Brazilian government created the Bolsa Familia Program to combat this kind of problem. This Program is a transfer income program subject to certain conditionalities as minimum school attendance of children under 17 years old. In 2006, almost half of people with income per capita R$ 300.00 per month declared receive the benefit of the program. Accordingly, the objective of this study was to analyze the impact of Bolsa Familia on child labor in Brazil in 2006. To achieve this goal, we used a Propensity Score Model, with data from the National Household Sample Survey (PNAD), for 2006. Contrary to what was expected, the results indicate that the program increased the number of hours of child labor in the country. However, this can be explained by the fact that families that receive Bolsa Familia are also those with higher socioeconomic vulnerability. So, they need to guarantee the survival with the income generated on child labor. Thus, to achieve good results in the fight against child labor, the government needs to invest not only in income transfer policies, but also in improving the labor market of adults and creating opportunities for social development for children.

Keywords: Bolsa Familia Program, Brazil, Child labor

1 INTRODUCTION

Child labor is a recurrent theme in the economic literature, where are approached its causes, consequences and the policies for its fight. According to Diallo et al. (2010), it is estimated that about 215 million of children aged between 5 and 17 years exercised some sort of child labor in 2008, seeing that 60% of those children had been involved in the farm sector, 7% in the industry and 26% in the service sector. In relation to the spatial distribution of child labor, one has that 53.28% of the child workforce aged between 5 an 14 years is situated in Asia and Pacific, 34.17% in Sub-Saharan Africa, 6.36% in Latin America and the Caribbean and 6.19% in other regions (Diallo et al., 2010).

Among the causes of insertion of the children into labor, one of the most cited is poverty. In this sense, Ferro and Kassouf (2005) observed that the contribution of the earnings of the children for the family income is important, because the per capita income is very low in the families in which the children work. Cacciamali et al. (2010) also stated that the low income population feel obliged to go precociously into job market, in pursuit of warranting his own

survival or complement the family income, allocating time in these activities at the expense of the studies. But, the precocious insertion of children in the job market causes the perpetuation of poverty and low schooling.

With regard to the consequences of child labor, Anker (2000) divided those effects into two levels: those which took place at the micro level, in the home environment and those which occurred at the macro level, upon the job market and economics. The micro level is related with family income and survival. The macro level involves matters relative to the wages and adult unemployment, economic growth and development.

In addition to studying the causes and consequences of that sort of labor, some authors sought to identify proposals for the fight or reduction of the problem. Tanaka (2003) suggests that an increase of school frequency enabled by the availability of schools of better quality and low cost, is a strategy to reduce child labor. Basu (1999) also highlights the creation of laws which make the school frequency compulsory as a strategy to fight the problem, because he believes it is easier to control the presence at school than the absence in job. The government still can intervene in the market creating other incentives which result into the reduction of child labor such as the provision of more and better schools and the improvement of the conditions in job market of the adults (Basu, 1999).

With the purpose of breaking the perpetuation of poverty and creating conditions for the children not to be obliged to go precociously into the job market, the income transfer programs appeared. In the case of Brazil, the Bolsa Familia Program was created by Law number 10.836, of January of 2004. The Bolsa Familia is an income transfer program subject to certain conditions such as compulsory school attendance for children between 6 and 17 years old and social care of children and teenagers of up to 15 years who have been removed from child labor by the Child Labor Eradication Program (Peti). The children who exercised child labor should take part in the Service of Convivence and Strengthening of Links (SCFV) of Peti and obtain minimal attendance of 85% of the monthly number of hours.

According to Cacciamali et al. (2010), programs as Bolsa Familia fight two aspects which characterize the reproduction of the poverty between generations: warrant a minimum level of subsistence income for the poor families and guard the obtaining of human capital of its beneficiaries. For the authors, that is justified by the fact that as the gain of the families rise, their members will be able to allocate more time to leisure or study, without loss to the minimum necessary to their survival, which could reduce the child labor of the poor families.

From the remarks presented and before the importance and the amount of resources intended to programs which seek to reduce the social inequalities, the objective of this work will be to examine the impact of the Family Allowance Program upon child labor in Brazil in 2006. Such a study allows us to verify if the program has effectiveness in reducing the child labor among the children of poor families or if it needs of bettering to fight such a reality.

2 THEORETHICAL REFERENTIAL

The theoretical model on which this work is based is the theory about the time allocation proposed by Becker (1965) with adaptations of Ersado (2002). According to that theory, the family's time is distributed among job, leisure and school. The family decision about the allocation of the time of the children takes into account the private returns of each of them. In

this work, we adopted the neoclassical model of unit home labor supply in which the family takes joint decisions on domestic consumption and labor supply of its members.

Ersado (2002) supposed that the decision about the participation of the children in workforce, leisure or school is determined by an adult person. In addition, the same author considers that a family composed by an adult and a child maximizes its function of utility into two periods (t and $t+1$), according to the equation (1).

$$V_t = U(C_t, L_{p,t}, L_{c,t}, S_{c,t}, X_t)$$ (1)

In which U is a concave utility function based on the consumption set (C), of the child's schooling (S_c), of the leisure time of the adult and child (L_p, L_c) and of a vector of individual and family characteristics (X).

In that model, the decision about the allocation of the child's time is done by the adult. So, if the decision is to insert the child into labor, he will earn a wage W_c in the first period and a salary W_u (wage of an unqualified adult) in the second period. Nevertheless, if the adult decides to send the child to school, she will not earn any salary in the first period and salary W_s (salary of a qualified adult) in the second period. One can suppose that $W_c \leq W_u \leq W_s$. Thus, the head of the family should maximize the utility function presented in equation (1) subject to the availability of time and to the restrictions of resources in each period:

$$C_t + W_t(L_{p,t} + L_{c,t} + S_{c,t}) = \Omega_t + W_t T$$ (2)

In which W_t is a vector of salary rates for the adult and child, T is the total time available for the family (that is, $T = T_p + T_c$), C_t is the value of the total consumption and Ω_t is the non-salary income. The non-salary income Ω_t includes the profits of the self-employment in farming and non-farming activities (Π), incomes coming from asset interests of the family (A_t), government transfers and other sources of revenues which are not derived from labor (Y_t), as presented in equation (3).

$$\Omega_t = \Pi_t + \delta A_t + Y_t$$ (3)

where δ is interest rate. The family head still should consider, in equation (2), the child's restriction time, since this time must be divided between the school, the job and leisure, in addition to the unpaid domestic work.

$$T_c = L_{c,t} + S_{c,t} + E_{c,t}$$ (4)

In which $E_{c,t}$ is the time spent in paid or unpaid labors.

The temporal trajectory of the family assets can be defined by equation (5).

$$A_{t+1} = (1+\delta)A_t + \{\Pi_t + Y_t + W_t E_{c,t} + W_t(T_p - L_{p,t}) - C_t\}$$ (5)

where A_t is the total of assets in the previous period and $\{\Pi_t + Y_t + W_t E_{c,t} + W_t (T_p - L_{p,t}) - C_t\}$ is the saving (or dissaving) in the period t after the spending on consumption. Using equations (3) and (5) and solving for Ω_t, one has:

$$\Omega_t = (A_{t+1} - A_t) + \{C_t - [W_t E_{c,t} + W_t (T_p - L_{p,t})]\} \equiv \Delta A_t \qquad (6)$$

where equation (6) consists in an inter-temporal measure of the non-salary income which allows the agents either to save or not.

From the equations above, it follows that the family head maximizes the domestic well-fare, equation (1), subject to the restrictions of the child's time, equation (4), and non-salary incomes, equation (6). The solution to these maximization problems is the indirect utility function which depends of the prices, salaries, family characteristics (included in the vector X_t), credit constraints and other factors as presented in equation (7).

$$V = U(\Gamma^*(W_t, \Pi_t, A_t, Y_t, X_t, \Psi)) \qquad (7)$$

where Ψ denotes all the observed and unobserved characteristics which affect the parents' decisions. Given that schooling is form of valuing of the human capital, a utility function under the decision of schooling is defined by:

$$V_s = U(\Gamma^*(W_s, \Pi_t, A_t, Y_t, X_t, \Psi)) \qquad (8)$$

So, the parents decide to send their children to school instead of sending to labor in the period t if they understand that the future profits will be higher with the valuing of human capital, that is,

$$V_s - V_u \geq 0 \qquad (9)$$

where V_u is the indirect utility function on the decision of not-sending the child to school.

$$V_u = U(\Gamma^*(W_u, \Pi_t, A_t, Y_t, X_t, \Psi)) \qquad (10)$$

3   METHODOLOGY
The present work used a propensity score model to determine the impact of the Bolsa Familia Program upon child labor in Brazil. The propensity score corresponds to the probability for the families to receive the Program benefit given its characteristics.

To measure the effect of the program on the child labor, may be used the Average Treatment Effect upon the Treaty (ATT), defined by Rosenbaum and Rubin (1983) as:

$$ATT = E(y_1 \mid d = 1) - E(y_0 \mid d = 1) \qquad (11)$$

where $E(.)$ denotes the expectative of the effect of the treatment, y_1 is the result of the treated variable (people given the benefit) and y_0 is the result of the control group (people who received no benefit).

As stood out previously, a problem to estimate equation (11) is that one individual who belongs, at the same time, to the treatment and control groups is not found. So, Araújo et al. (2010) suggested that the replacement of $E(y_0|d=1)$ by the group of persons who effectively do not take part in the program $E(y_0|d=0)$. In that way, equation (11) turns into:

$$ETM_1 = E(y_1|d=1) - E(y_0|d=0) \tag{12}$$

Nevertheless, to estimate the effect of the treatment according to equation (12) can generate biased results, since the adhesion to the treatment no always is random, depending on a set of characteristics of the participants (Araújo, 2009). Furthermore, persons with similar characteristics may or not be beneficiary of the program. So, the results do not depend on the characteristics of the persons, though the selection is done on the basis of observable characteristics (Araújo, 2010).

To solve the bias problem of self-selection of the sample, it is necessary to impose some conditions. At first, one should consider the Conditional Independence Hypothesis (Rosenbaum and Rubin, 1983), which suggests that the results is independent of the treatment so as to the average effect of the treatment is obtained on the basis of the differences among the results of the treated and non-treated ones.

The Propensity Score Model consists in finding the counterfactuals, which is what would have happened if it had not been implemented. Nevertheless, to estimate the propensity score, it is necessary to adopt a statistical model with limited dependent variable, and in this work was employed the Logit Model. So, from the estimate of the propensity score, one has that the Average Treatment Effect (ATT) can be estimated according to equation (13):

$$ATT = E\{E[y_1|d=1, p(X_i)] - E[y_0|d=0, p(X_i)] | d=1\} \tag{13}$$

In which the expectation is about the distribution of the probability of X_i given the treatment, and y_1 and y_0 are the potential results for the two counterfactual situations, with or without the treatment (Becker and Ichino, 2002).

However, Becker and Ichino (2002) highlighted that to estimate the Treatment Effect is still necessary to adopt a matching algorithm and in this work was adopted the Nearest Neighbor Matching, in the same way as in Araújo (2009) and Araújo (2010), in which all the units of the treatment find a match in the control group (Becker and Ichino, 2002).

To test the matching quality, it was compared the situations before and after the use of the propensity score. So, it was compared the standardized bias and pseudo R^2, and both must be reduced after pairing, so that there are no systematic differences between the two groups. In addition, it was verified the existence of bias of the omission of relevant variable from the limits of Rosenbaum, which surveys how the omission of a variable can influence the selection process in order to invalidate the implications of corresponding analysis.

3.1   Source of data
The data utilized in this work were obtained in the National Household Sample Survey of the Brazilian Geography and Statistics Institute (IBGE, 2006), seeing that those data were re-weighted for Brazil in 2009 to consider the new population projections designed by the IBGE

in 2008. It was decided for the data of 2006 because the IBGE designed in this year supplementary works about the access to income transfers and social programs.

For obtaining the results, the sample was limited to the families consisting of individuals aged between 0 and 17 years and who had a per capita income liquid of the government transfers of up to R$ 300.00, amounting to 21,886 individuals. This delimitation of the sample was also adopted by Araújo (2009), Araújo (2010) and Araújo et al. (2010) and corresponds to the families suitable to receive the Bolsa Familia Benefit, in addition to the families who could finding themselves in situation of economic vulnerability.

The variables determining the participation in the Family Allowance in the Logit model were those related with the characteristics of the children and their families. Those variables characterize some social and economic conditions which could contribute towards the increase or reduction of the selection probability for the program.

Among those variables were considered as characteristics of the children the age (in years) and a dummy for the color (1 if the child is black and 0 for the others). A positive relationship between the age and the probability of participating in the program and a negative relationship between the color and the participation in the Bolsa Familia Program is expected.

Other variables relevant to the survey of probability of participation in the Bolsa Familia Program were the parents' characteristics and the family characteristics, being that the former ones were divided into schooling of the father and of the mother (in years) so that a negative relationship between those variables and the participation in the program is expected.

As to the family characteristics, the variables regarded are the per capita income liquid of the government transfers, a dummy for families headed by females (1 if yes and 0 if not), a dummy for families dwelling in rural areas (1 for rural and 0 for urban), a dummy for families dwelling in metropolitan regions (1 if yes and 0 otherwise), number of children of 0 to 5 years in the family and number of children of 6 to 17 years. The dependent variable of the labor is the number of hours of child labor (*hours_inf*). It is expected to obtain a positive relationship between the probability of participating of the program and the dummy of families headed by females, a dummy of families dwelling in rural areas and the number of children of 0 to 5 years or of 6 to 17 years and a negative relationship between the probability of participating in the Bolsa Familia Program and the per capita income liquid of the government transfers and the dummy of families dwelling in metropolitan regions.

4   RESULTS
To evaluate the impact of the Family Allowance Program upon child and teenager labor, a non-experimental method (matching) was utilized to find a control group the characteristics of which were as close as possible to the treated ones. The comparison among the groups, at first, is done by means of the Logit model, given that one does not previously the propensity scores (Araújo, 2010). That model estimated the probability of taking part or not in the program, the results of which are presented in table 1.

Table 1: Estimate of the Logit model for the group of families of Brazil with per capita net income of the transfers up to R$ 300.00, in 2006 (Results of the work)

	Coefficient	Standard Error	Z	p-value
School Attendance	0.419767	0.037709	11.13	0.000000
Mother's schooling	-0.051696	0.003991	-12.95	0.000000
Father's schooling	-0.003636	0.004091	-0.89	0.374000
Age of child	-0.004092	0.004002	-1.02	0.307000
Number of children 1	0.067546	0.018778	3.60	0.000000
Number of children 2	0.308758	0.012028	25.67	0.000000
Head_female	-0.200266	0.195703	-1.02	0.306000
Rural	0.483943	0.034456	14.05	0.000000
Metropolis	-0.605106	0.036018	-16.80	0.000000
Family income	-0.002654	0.000185	-14.31	0.000000
Black	0.037256	0.059414	0.63	0.531000
_cons	0.150244	0.062205	2.42	0.016000

The analysis of table 1 allows us to identify that some variables were not statistically significant. That means that the father' schooling, the age of the child, the families headed by female (*head_female*) and the dummy of race (*black*) are not relevant variables in determining the probability of the families to be beneficiaries of the Bolsa Familia Program. Nevertheless, even not being significant, those variables should not be excluded from the system, for they constitute important sources in the diagnosis of child labor (Araújo, 2009).

To the other variables, it was found that school attendance increased the probability of participating in the program and the per capita income liquid of the government transfers (*family income*) reduced this probability. These results are consistent with the expected, because the conditionalities for the family to be beneficiary from the Bolsa Familia Program is the school attendance of the children of 6 to 17 years and the low per capita income.

Other variables which reduce the probability of participation in the program were the mother's schooling and the fact that the individual living in a metropolitan region. Some of those results were also obtained by Araújo (2009), Araújo et al. (2010) and Araújo (2010), but such works considered the family head's schooling while the present study opted for the distinction between the male's and female's schooling level, observing that only the female's schooling had a significant impact upon the probability of participation in the program.

On the other hand, the number of children of 0 to 5 years, of 6 to 17 years and the fact of living in a rural area increased the chances that the individual was a family Allowance Program beneficiary. Similar results were obtained by Araújo (2009) and Araújo et al. (2010).

The next procedure was to analyze the quality of the pairing. The validity of the conditional independence hypothesis was tested on the basis of the standardized bias reduction analysis and in the Pseudo R^2 test, the results of which are presented in table 2.

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Table 2: Standardized bias analysis for the sample of matched and unmatched individuals
(Results of the work)

Variable	Sample	Mean		Reduction of the bias
		Treated	Untreated	
School attendance	Unmatched	0.72306	0.58451	
	Matched	0.68853	0.58451	24.9
Mother's schooling	Unmatched	5.01470	6.61740	
	Matched	5.45480	6.61740	27.5
Father's schooling	Unmatched	2.73150	3.23230	
	Matched	2.86100	3.23230	25.9
Age	Unmatched	8.28990	7.10490	
	Matched	7.95580	7.10490	28.2
Number of children1	Unmatched	0.88980	0.91385	
	Matched	0.88070	0.91385	-37.8
Number of children2	Unmatched	2.04320	1.20430	
	Matched	1.64540	1.20430	47.4
Head_female	Unmatched	0.00371	0.00888	
	Matched	0.00439	0.00888	13.2
Rural	Unmatched	0.42447	0.22901	
	Matched	0.34172	0.22901	42.3
Metropole	Unmatched	0.16632	0.33243	
	Matched	0.19667	0.33243	18.3
Family income	Unmatched	169.87000	185.10000	
	Matched	175.84000	185.10000	39.2
Black	Unmatched	0.06378	0.06599	
	Matched	0.06509	0.06599	59.3
		Pseudo R^2	LR	P-value
Summary	Unmatched	0.104	3145.660	0.000000
	Matched	0.054	1507.940	0.000000

The results of table 2 allow us to identify that, with the exception of the variable concerning the number of children of 0 to 5 years in the family (*number of children1*), the other variables presented reduction of the bias. In way complementary, the comparison among the results of the Pseudo R^2 test before and after the matching indicated that the same obtained a significant reduction when matched, which corroborates the fact that there are no systematic differences in the distributions of the variables between the two groups.

Other procedure used to test the quality of matching was the verification of the existence of bias of omitted bias variable. The method of analysis of that bias is based upon the Rosebaum limits, the results indicated that there is no bias resulting from variable omitted from the model. In that manner, the model was quite adjusted with a balanced distribution of the independent variables in the two groups and validation of the bias absence hypothesis of omitted relevant variable.

After the previous procedures, it was sought to evaluate the impact of the Bolsa Familia Program upon the child labor in Brazil. That procedure was carried out from the effect of the treatment on the treated one, adopting the nearest neighbor matching method in the same form as in Araújo (2009) and Araújo (2010). The results of this algorithm are reported in table 3.

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Table 3: Effect of the average treatment upon the treated one for the variable hours of child labor (horas_inf) for Brazil, in 2006 (Results of the work)

Response variable	Treatment	Control	Estimator of the ATT (nearest nieghbor)
Hours_inf	11869	5250	0.525[***]

Note: [***]Significant at 1%.

The results of table 3 allows us to verify that the Bolsa Familia Program increased the number of hours of child labor in Brazil by 52.5%, contrary to the expected. This result stands for a perverse effect of the program and was also observed by Cacciamali et al. (2010), Araújo (2009) and Araújo et al. (2010). Cacciamali et al. (2010) found that the Bolsa Familia Program increased the incidence of child labor in rural and urban areas. Araújo (2009) noted that the program increased the proportion of children and teenagers who study and work, while Araújo et al. (2010) observed that the Bolsa Familia is an important instrument to raise the children's school attendance, but does not show enough to restrict work activities.

A possible explanation for that result is concerned with the fact that, given the characteristics of the sample as well as the objectives of the program, it is possible to suppose that the families more liable to receive the benefits are those who are more likely to insert their children into labor market (Ferro and Kassouf, 2005). The same authors still stated that, since the public managers are concerned with meeting mainly the most needy, those persons who were more prone to work because of poverty will also be those will form the target public of those programs.

Therefore, although that result is the opposite to the expected and to highlighted in some national and international works (Araújo, 2010; Ravallion and Wodon, 2000), the structure of the program may not be enough to fight all the determinants of child labor. For the Bolsa Familia Program to be more effective in combating child labor, would require actions that attack the causes of that labor, among which one has the shortage of cultural, social and economic resources (Araújo et al., 2010).

In this sense, to reduce effectively child labor in Brazil, it is necessary to modify the program or create strategies to fight other determinants of that labor, not only poverty. So, the families will have better conditions, which may favor the development of children and youth and contribute to the eradication of this sort of work.

5 CONCLUSION

The present work sought to analyze the impacts of the Bolsa Familia Program on child labor in Brazil. So, the propensity score model was utilized and the results were estimated from the data of PNAD 2006. The sample limited itself to the families holding a per capita income liquid of the government transfers of up to R$300.00 and which had children and teenagers under 18 years old.

From the application of the above cited methodology, it was observed that the variables which contributed to raise the probability for a family to be beneficiary of the program are the school attendance of children and teenagers, the number of children and the living in rural areas. On the other hand, the variables concerning the mother's schooling, living in metropolitan region and per capita family income liquid of the government transfers decrease that probability.

It was still found by means of the matching quality tests and Rosembaum limits, which the model was well adjusted, seeing that no bias caused by omission of relevant variables was identified. So, the analysis of the impact of the program on child labor in the country was conducted. The results of that work indicated that the Bolsa Familia Program increased the number of hours of child labor, which reveals itself as a perverse effect of the program, since that aims to reduce the families' poverty. However, as the income transfer policies are turned to the families which present greatest economic and social vulnerability, one has that they seek other means of complementing the family income and warrant survival, even for that it is necessary to insert their children precociously in job market.

Given this scenario, to reduce the incidence of child labor in the country, it is necessary to invest into policies not only based upon income transfer, but in the increase of employment for the adult persons and creation of opportunities of social development of children. The fight against other determinants of child labor, in addition to poverty, will also be fundamental to achieving the desired goals of reduction and even the eradication of child and teenage labor in Brazil.

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LEGAL REGULATION AND MECHANISMS OF A CURRENCY TURNOVER CONTROL IN THE RUSSIAN FEDERATION

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ABSTRACT
In this study there are considered mechanisms of a currency turnover control and legal regulation of foreign economic activity from the standpoint of the legislation of the Russian Federation, and also taking into account the accession of the Russian Federation to the WTO and according to the provision on the Customs union in frames of Eurasian economic community (Belarus, Kazakhstan, Russia). It is also shown a historical review of formation of foreign economic activity in the Russian Federation. Technologies and possible mechanisms of interaction of subjects of the Russian Federation with foreign arbitrators with a view of attraction of direct investments and obtaining the income out of commercial activity are offered. In particular, the necessity of improvement of mechanisms of currency turnover control and monitoring of the foreign economic activity, interfering mass outflow of the capital abroad is indicated.

Keywords: *Currency turnover control, Direct investments, Foreign economic activity, Legal regulation*

1 INTRODUCTION
In the current research it's shown the need of improvement of currency turnover control system at this temporary stage and at the same time of preparation of its reforming in the long term developments of a domestic financial system. Today it is obvious the necessity of available problems solution through improvement of mechanisms of implementation of currency turnover control by change standard legal base of currency regulation and currency turnover control. Relevance in the long term improvement of system of currency control is caused by need of institutional reforming, change of forms and methods of implementation of currency turnover control, possible creation of other institutes of its implementation, or change of powers of existing institutes of the currency turnover control faced on efficiency of all system of currency turnover control. For the effective organization of currency turnover control the clear, sustainable system of currency turnover control, effective mechanisms of

implementation, the accurate, consolidated and efficient legislation which reflects economic interests of the state is necessary, following a course on diversification and economy liberalization, including conditions of accession of Russia to the WTO. The system of currency turnover control has to be focused on protection of interests of participants of foreign economic activity, interests of the state in the course of formation foreign trade and the balance of payments of the country and implementation of the state function of the currency regulator, with the general orientation on prevention of commission of offenses in the sphere of economy and creation of effective barriers on a way of capital flight from the country.

Cross-border movement of the capital, that is its export and import – one of aspects of internationalization of the economic life which considerably amplified in the last third of the last century and has generated processes, called by globalization. In the course of the international exchange of the country carry out both export, and capital import. Therefore in cross-border movement of the capital it is possible to judge their original position, only correlating balance of export and import. At such approach it becomes clear how sufficient the volume of own financial resources (savings) for satisfaction of requirements of accumulation. In case of excess of assets over obligations the pure export (outflow) of the capital testifying to its "redundancy" in the country takes place, in the return case there is a pure import (inflow) of the capital to the country which testifies to its shortcoming.

In the last decade in world practice special importance is gained by legitimacy of receiving money therefore money at the disposal of legal entities and the citizens, used in the international and internal payments, have to have proofs of a legal origin.

In Russia a currency turnover control carries out function of protection of national economy from a surplus of foreign currency and therefore calculations between residents in foreign currency, except for the cases established by Bank of Russia aren't allowed. At the same time there are no restrictions in carrying out currency transactions by nonresidents in Russia.

The policy of the Central Bank of Russian Federation (CB RF) in the field of currency turnover control is under construction on two fundamental principles: first, observance of interests of society and the state, ensuring economic safety of the country, secondly, the accounting of a real situation and tendencies in domestic economy and in the world markets of goods, services and the capitals.

In frames of such approach of the CB RF concentrates efforts on the following main directions of the considered sphere of the relations. The first consists in application in full systems of the prevention of illegal currency transfer in foreign trade of goods based on customs – bank control technology. Today customs - bank control is capturing about 80% of the Russian commodity export and 90% of commodity import (except for barter, processing under customs control and some other customs regimes). The result of specified mechanisms application was expressed that not return of currency revenue from export came nearer to minimum for the last fifteen years level – about 3% from the volume of the export, covered by customs - bank control whereas in 1992-1993 a half revenue from export of goods didn't come back to the country.

In 1996 in connection with acceptance by the Russian Federation of obligations under article VIII of Articles of the Agreement of the International Monetary Fund the CB RF lifted limits

on the current operations, having provided possibility of nonresidents to convert the rubles received from carrying out the current operations, in foreign currency.

As for negative impact of capital flight on economy, in the market liberalized economy cross-border movement of the capital is defined by efficiency of its application in the different countries. The countries, being characterized the greatest return on the capital; attract it from the countries, differing with smaller efficiency. It is known that in the nineties Russia differed rather low average return on the capital invested in production. At the same time the income from financial and trade operations until the end of the 90th last century was significantly higher, and in the middle of the considered period operations in the financial market were the main source of the income both banks and many enterprises of real sector of economy that had a pernicious effect on a condition of the Russian industry – available funds were always more favorable to invest, for example, in the state papers, than in the productive capital. When the country possesses sufficient stocks of foreign currency and its trade balance is steady and isn't negative, it can allow invest the domestic capitals to other countries. However, if the trade balance is steadily negative, or (as in a case with Russia) there are considerable restrictions on uses of the currency income, in particular, high level of external debt, free streams of the capital will quickly destroy a basis of currency and monetary system of the country and will lead at least to devaluation of national currency. It was recognized already also by the international financial organizations, in particular, IMF.

In Russia throughout the entire period of market transformations the state carried out work on improvement of the mechanism of currency turnover control. In process of emergence of necessary economic preconditions for liberalization of the currency legislation were taken steps on revision of the principles of currency regulation and the currency turnover control, directed on their reduction in compliance with the standard norms in world practice.

2 CURRENCY CONTROL IN THE RUSSIAN FEDERATION: STANDARD REGULATION, PRINCIPLES, DIRECTIONS, FORMS AND METHODS

Currency control is one of types of the state control exercised in the financial and legal sphere. Without this control it is impossible to imagine stable functioning of a financial system, and also to ensure economic safety of the state. The attention was paid to this circumstance practically at all stages of formation and development of currency system in Russian Federation. Questions of currency turnover control became especially important in the nineties. Capital flight abroad, terrorism financing, legalization of the money received by an illegal way, caused emergence: Instructions of Bank of Russia, and the State Customs Committee of Russia from October 12, 1993 №19/01-20/10283 "About a procedure of currency turnover control of income in the Russian Federation of currency revenue from export of goods", Resolutions of the Government of the Russian Federation from March 6, 1993 №205 "About strengthening of currency turnover and export control", the Decree of the President of the Russian Federation from November 21, 1995. №1163 "About prime measures for strengthening of system of currency turnover control in the Russian Federation", etc. The resolution of the Government of the Russian Federation from November 15, 1993 № 1157approved the Provision concerned Federal service of Russian Federation on currency turnover and export control which existed up to – 2000. According to the Resolution of the Government of the Russian Federation from December 21, 2000 No. 990 functions of this Service were transferred to the Federal Ministry of economic development and trade.

Adoption of the above-named acts, and also transformation of appropriate authorities of executive power didn't help creation of the effective mechanism of currency turnover control in the nineties. For its improvement a number of Federal laws were accepted: "About export control", "About counteraction of legalization (laundering) of income gained by a criminal way, and terrorism financing", new editions of Federal laws: "About the Central bank of Russian Federation", "Currency regulation and currency turnover control", "About the foreign trade activity", "The Customs Code of the Russian Federation", etc. Instructions of the above-mentioned acts are urged to strengthen the mechanism of currency turnover control, to create obstacles in a way of capital flight abroad, to stop channels of financing of terrorism, and also legalization of income gained by an illegal way. Currency turnover control is a component of the mechanism of regulation of the public relations connected with implementation of currency transactions. Currency turnover control is understood as a complex of the administrative and organizational measures which are carried out by representatives on the basis of the law by government bodies or other special organizations (agents of currency turnover control) and directed on realization of an order of commission of currency transactions and transactions regarding currency restrictions; and also measures for identification, prevention and suppression of violations of this order. For today there is no legal definition of currency turnover control. It will be reasonable legally formalize it. The public relations developing in form of implementation of currency turnover control, are regulated by Federal laws: "On currency regulation, and currency turnover control", "About the Central bank of the Russian Federation (Bank of Russia)", The Customs code of the Russian Federation", etc. Requirements of currency turnover control are established concerning the Russian and foreign physical and legal entities in connection with their currency possession and using, implementation of currency transactions, use of bank accounts and represent a number of the restrictions which list is defined by the currency legislation of the Russian Federation and is established by the Government of the Russian Federation and Bank of Russia.

The main normative legal act of the currency legislation regulating currency legal relations, the rights and duties of the Russian and foreign physical and legal bodies, powers of bodies of currency regulation, and also the procedure, subject structure of currency turnover control is the Federal law from 10.12.2003 № 173 "On Currency Regulation and Currency Turnover Control".

The currency legislation covers laws, and acts of bodies of currency regulation (CB RF and the Government of the Russian Federation), the normative legal acts of federal executive authorities adopted in frames of their competence. Acts of the currency legislation are subject to official publication, unpublished acts aren't applied. Bodies of currency turnover control can issue acts of currency turnover control on items carried in accordance of their competence, strictly in cases of currency legislation. Such acts shouldn't contain points concerning currency operations. All ineradicable doubts, contradictions and ambiguities of acts of the currency legislation and acts of bodies of currency control are interpreted in favor of residents and nonresidents (pct 3 - 6 of the Art. 4 of Federal Law №. 173). In the most general view currency control can be characterized as state activity represented by bodies and agents of the currency turnover control, directed on ensuring observance of the currency legislation at implementation of certain currency transactions. More developed definition of currency turnover control can be formulated as a special kind of activity of the state structures authorized and obliged to carry out in the territory of the Russian Federation control functions at implementation of the operations connected with transition of the property right and other

rights on currency, movement of currency through customs border of the Russian Federation and also operations of nonresidents in currency of the Russian Federation.

3 POSSIBLE MECHANISMS OF IMPROVEMENT OF CURRENCY TURNOVER CONTROL SYSTEM

The main directions of improvement of currency turnover control system have to be aimed at institutional changes and the corresponding change of forms and methods of implementation of currency turnover control. The analysis of the current legislation shows a predominating role of the Government of the Russian Federation in system of currency turnover control, not as controler, but like an administrator. The government of the Russian Federation doesn't implement direct currency turnover control, but simply defines the direction vector of currency turnover control. Structures subordinated to the Government of the Russian Federation in system of currency turnover control include the following: the Ministry of Finance of the Russian Federation (MF RF), the Federal Customs Service (FCS), the Federal Tax Service (FTS). Their role and power in the system of currency turnover control resonable expedient to be reconsidered. It is necessary to give accurate definition of functions, powers and regulations of activity of above-named subordinated structures. Position of the Central Bank of the Russian Federation as body of currency turnover control is ambiguous. CB RF, in particular, is organizing and carrying out currency turnover control according to item 12 of Art. 4 of the Federal Law from 10.07.2002 №86 "About the CB RF". At the same time, according to existing Federal Law "On currency regulation and currency turnover control", the CB RF implements control over certain subjects of currency turnover control and interacts with other bodies that it is difficult to call "organization" of currency turnover control. In this case the CB RF has to carry out and coordinate activity of FTS, FCS, Federal Service for Financial and Budgetary Supervision (Rosfinnadzor) that isn't provided by the current legislation. The observed dissonance could be resolved by means of redistribution of functions, as follows: to fix function of currency movement control for the CB RF, and turnover of goods, transport means and services for FCS, estimation of income and taxation for FTS. Out of results of research becomes obvious that the CB RF is actually unnecessary segment in system of bodies of currency turnover control. If required, its functions in currency turnover control can be transferred to other institutes without violation of structure, directions and forms of currency turnover control. So, it is possible to refuse the mechanism of customs bank control simultaneously investing the power of currency turnover control over circulating goods services and transport means through customs border of the Russian Federation. For effective implementation of function of currency turnover control will be reasonable to associate FCS and FTS with ensuring rotation of employee for an exception of corruption component in their activity.

At research of a legal status of Rosfinnadzor numerous contradictions in regulations of its activity are revealed. Among them: problems in application of instructions, as main instrument of execution by Rosfinnadzor of function of currency turnover control body; low efficiency of reaction, by means of instructions and representations which are submitted for violation of the currency legislation by results of hearing of cases about administrative offenses in this connection, between commission of an offense and issue of the instruction can pass years; and others. As increase of overall performance of Rosfinnadzor, it is advisable, for elimination of the specified problems, to clean control functions, having left supervising in system of currency turnover control, by means of modification of Administrative regulations of Rosfinnadzor.

Creation of the mechanism of distribution of functions between subjects of currency turnover control is advisable, namely: (1) function of control of circulation of currency means needs to be assigned to the Central Bank of the Russian Federation legislatively; (2) function of control of turnover of goods, vehicles and services through border of the Russian Federation needs to be referred to competence of the Federal Customs Service; (3) estimates of the income and the taxation at implementation of currency turnover control need to be carried to Federal Tax Service functions. Considering the importance of FCS and FTS, volume of currency turnover control implemented by them, a role in all system of currency turnover control, it is necessary to associate the Federal Customs Service and Federal Tax Service for increase of efficiency of implementation of functions of currency turnover control by them. Taking into account the above mentioned and for the purpose of increase of overall performance it is necessary to clean control function of Rosfinnadzor, having kept realization of its supervising function.

4 STANDARD AND LEGAL IMPROVEMENT OF SYSTEM AND MECHANISMS OF CURRENCY TURNOVER CONTROL

The most vital and conceptual point of improvement of currency turnover control system in the Russian Federation is change the mechanism of implementation of currency turnover control by bodies and agents. By upgrade of the status of agents of currency turnover control such as: FTS and FCS from level of agents to level of bodies of currency turnover control, and also creation of the mechanism of the associated bodies of FCS, FTS, CB RF, interacting in a uniform chain, for ensuring expeditious interaction at direct implementation of currency turnover control in the Russian Federation.

The government of the Russian Federation plays an essential role not only in regulation of currency legal relations; control function is inherent to it. The government possesses the right of differentiation of functions between bodies of currency turnover control and ensuring their interaction among themselves, and also the right of delegation of the powers to the body of currency turnover control. At the same time, the Federal Constitutional Law "About the Government of the Russian Federation" doesn't carry out differentiation between regulating and control function of the Government of the Russian Federation in the sphere of currency legal relationship.

Among ways of strengthening of efficiency of customs currency control of export-import and barter operations it seems to be very important to legislatively upgrade the status of the Federal Customs Service of Russia. Happened in 2004 legislative fall of the status of customs authorities in the sphere of currency control from level of body of currency turnover control to the agent of currency turnover control doesn't promote improvement of quality and productivity of its activity on a number of positions. Preservation for FCS of the status of currency turnover control body would grant it the right to issue the acts of currency turnover control according to its competence including ones combined with other concerned bodies of currency turnover control. Subordination of FCS during the period from 2004 to 2006 to the Ministry of economic development and trade of the Russian Federation shouldn't have minimized a role of FCS in the sphere of currency transactions control of residents and nonresidents, connected with circulation of goods and vehicles through customs border of the Russian Federation, having left behind it functions of special structure on control and supervision in the field of customs affairs, on fight against contraband and counterfeit production. FCS can't effectively carry out currency turnover control functions without closely interacting with bank structures, including the Central Bank of Russia. This interaction is necessary for FCS as for adoption of normative documents (the status of the

agent of currency control doesn't grant it such right), and for expeditious interaction of customs authorities and authorized banks on implementation of currency control of actions of participants of foreign trade activities when moving goods and vehicles circulating through customs border of the Russian Federation as well as timely and in a full amount repatriate of financial funds back to the country.

Along with a problem of upgrading the status of FCS to the level of body of currency turnover control it is important to create rational for modern conditions the mechanism of customs authorities interaction and bank structures in frames of implementation of currency turnover control of the foreign trade operations. Currency turnover control in our country is generally automated, but each department which is carrying it out, uses the information systems not connected with each other. Instead of accurate exchange of information on a telecommunication network customs authorities and authorized banks interaction is realized today most often by means of inquiry letters that doesn't allow them quickly implement currency control and completely solve the problems concerned. Inquiries now became to change to a systematic exchange of electronic information between these subjects of currency turnover control on separate, doubtful currency transactions. Lack of a certain system of interaction and exchange of information between authorized banks and customs authorities is essential omission of policy of currency regulation realized today and demands the fastest legal completion.

In many respects large volumes of illegal outflow of the capital from the country in recent years can be explained with separate actions of subjects of the currency turnover control, created by existing currency legislation, for participants of foreign trade activities by currency transactions. Originally in the adopted Federal Law from 10.12.2003 № 173   only authorized banks were defined as agents of currency turnover control. Then during 2004 - 2005 tax and customs authorities were in addition included in this law as agents of currency turnover control. As agents of currency turnover control, authorized commercial banks and customs authorities are obliged to interact closely not only among themselves, but also with bodies and agents of currency turnover control representing other state departments.

It is possible to take the scheme of customs bank control for a basis of new system of interaction of customs and bank structures. It is advisable to include in the new scheme of CBCC and tax authorities, having called it system of passive monitoring: customs bank tax currency turnover control (CBTCTC) considering that circumstance that now in the Federal Law № 173 authorized banks, customs and tax authorities are defined as agents of currency turnover control. Thus, the full chain of currency turnover control will be closed. Authorized banks will be able to supervise timeliness and completeness the receipt in the Russian Federation currency transactions funds carried out by residents and nonresidents. Customs authorities implement currency turnover control over actions of participants of foreign trade activities at circulation of goods and vehicles through customs border of the Russian Federation as well as Russian currency, internal securities and currency funds. Tax authorities provide currency turnover control over the foreign trade transactions which subjects don't contain a material form, completeness of receipt in the Russian Federation proceeds from export of works, services, intellectual property; state registration of physical and legal bodies and their record; control over opening residents accounts abroad and circulation of funds on them.

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Introduction of new system of customs bank tax currency turnover control will allow agents of to carry out comparison of contract cost of export or import of goods, contract amounts, dates of payments and deliveries, and also to estimate real volumes of non repatriated currency. Introduction of the automated system of an operational exchange and information processing on currency transactions carried out by residents and nonresidents will allow replacing the current mechanism of agents' interaction of by means of inquiry letters on separate doubtful operations with the mechanism of the continuous automated control, to increase its efficiency and efficiency.

Proceeding from said above, it is necessary to reform existing system of currency turnover control taking into account the current problems and the near-term outlook. Here the offered scheme of CBTCTC is actual. Considering requirements of the World Trade Organization for liberalization of the foreign trade and currency legislation, this scheme is conditionally possible to call the customs bank tax currency monitoring (CBTCM), emphasizing not mainly on punitive, but on preventive measures of administrative influence (preventions, penalties, deprivation of licenses, etc.) according to prevention of rules of international trade and implementation of currency transactions violations by participants of foreign trade activities. Developing interaction of customs authorities with authorized banks in the solution of this problem the essential help here could render strengthening of cooperation of customs authorities with other supervising structures on the organization of currency control over implementation of the foreign trade operations.

Developing interaction of customs authorities with authorized banks in the solution of this problem the essential help here could render strengthening of cooperation of customs authorities with other supervising structures on the organization of currency turnover control over implementation of the foreign trade operations.

It looks necessary to activate interdepartmental interaction and "common information space" creation considering that in the current legislation there are gaps and contradictions on the control organization over implementation of export-import transactions and the foreign trade barter transactions as well as specifics of their implementation and complexity of control organization. It is a question of active use by customs authorities of information bases of FTS, Rosfinnadzor, the Ministry of Economic Development of the Russian Federation, the Ministry of Internal Affairs of Russia, the Central Bank of Russia and other structures in identification and suppression of the tax offenses connected with realization of foreign trade operations.

Creation in the country of a uniform information database which would reflect commission of offenses and crimes in the sphere of the currency and tax legislation which law-enforcement and economic departments could use within their competence is obviously important. For this purpose expedient to create uniform information and analysis center for Federal Security Service of Russia, the Ministry of Internal Affairs of Russia, the Prosecutor General's Office of the Russian Federation, the Central Bank of Russia, FTS of Russia, FCS of Russia, Rosfinnadzor, Rosfinmonitoring and other concerned departments. Duplication in their work can be avoided as in the relevant laws and provisions crimes and the offenses carried to competence of each of these structures are defined.

Improvement of information exchange with other competent authorities can be provided by development of combined standards and techniques defining a uniform order and requirements to implementation procedures of information and expeditious interaction with

them. Because economic crimes know no limit, for successful work customs authorities need adjustment of the strongest contacts with financial, customs and law-enforcement structures in foreign countries.

Joining to the WTO demand from the Russian Federation creation of a legal framework for civilized market interstate cooperation and attraction of the foreign enterprise capital. Russia, in connection with accession to WTO, assumed obligations, in particular, to provide necessary level of transparency of the legislation and practice of regulation of foreign economic activity. Work of effective and transparent information and analytical base will promote strengthening of interstate economic interactions, increase in trade balances of the countries - participants of the WTO, income to Russia of direct investments, and to preclude capital flight from the country (Pakhomov and Balasanyan, 2011). In the foreign organizations high standards of disclosure of information are accepted, the national organizations will seek to correspond to them that will promote also increase of transparency of activity in the market of financial services and thus will facilitate regulation implementation, will reduce effect of an administrative resource and excessive bureaucracy (Pakhomov, von Cramon-Taubadel and Balasanyan, 2012). From the expert's standpoints (Stepanova, 2012), having added liberalization of financial sector by effective reform of system of state regulation in this sphere, the country receives double benefit: increase in volume of trade in the conditions of stability increase in financial sector and in economy as a whole. The reforms directed on optimization of system of state regulation of economy are considered as one of the reasons of economic growth and development. Moreover, there are proofs of existence of positive dependence between openness of economy and economic stability, opening of sector of the financial services, accompanied by its effective regulation promoted strengthening of economy and stimulated economic growth in such countries as Indonesia and Singapore. Great value has that fact that GATS doesn't prohibit applying the prudential measures directed on maintenance of stability and integrity of a financial system. Moreover, at emergence of threat of problems with the balance of payments, the country has according to article XII full authority regardless of the accepted obligations to enter temporary restrictions on trade in services, including on implementation of the current operations.

Besides, the mentioned measures of improvement of system of currency turnover control will help Russia, after accession to WTO, to reduce probability of possible complications on the way of integration Russia with the countries of EurAsEC, the CIS and, first of all, the Customs union within the Euroasian economic community as the standard and legal base of the Customs union will be coordinated with WTO membership requirements, and these measures will promote maintenance of level of transparency of the legislation.

5   CONCLUSION

As a result of current legislation research in the sphere of currency regulation and currency turnover control it is possible to state inconsistency in work of subjects of currency turnover control, duplication of functions, lack of efficiency at control over the currency transactions, constantly changing regulatory base. All these factors characterize an inefficiency of operation of the existing mechanism of currency turnover control. The essence of offered changes of currency turnover control mechanisms and the currency legislation is reduced to the following:

  − to creation of the mechanism of the customs bank - tax currency turnover control for a
    direct information exchange between subjects for implementation of the most careful
    and effective control for participants of foreign trade activities,

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- need of increase of the status of FCS of Russia to level of body of currency turnover control for the purpose of conditions creation for operational work of Service taking into account volume of functions implemented by FTS as the agent of currency turnover control,
- modification of legal status of Federal service of financial and budgetary supervision having left in its competence only supervising functions over observance of the currency legislation.

Taking into account requirements of the WTO for liberalization of the foreign trade and currency legislation, in a type of accession of Russia to it the offered mechanism of customs bank-tax currency turnover control it is possible to call conditionally the customs and bank and tax currency monitoring (CBTCM) which will promote increase of transparency of foreign economic activity. Having placed the main emphasis on preventive measures, instead of criminal prosecution of participants of foreign trade activities for already executed violations of the rules of international trade and currency transactions and having passed to effective measures of administrative influence (preventions, penalties, license deprivations), it will be possible to carry out further monitoring of currency transactions with bigger efficiency and to warn the facts of possible violation of the currency legislation.

In the course of improvement of system of currency turnover control in the Russian Federation there is a need of creation of a uniform information database which, within the competence, law-enforcement structures and financial departments could use. For this purpose it is necessary to establish in the country the uniform information and analysis center available to power structures, the Prosecutor General's Office, the Central Bank of the Russian Federation, FNS, FTS, Rosfinnadzor and other concerned state departments, including foreign organizations (such as FATF). Thus, it is obviously possible transfer of the Russian system of currency turnover control to new qualitative and open level taking into account the entry of our country into the WTO, and also protection of its economic interests by means of the instrument of currency turnover control.

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A MODEL FOR HEALTH DEVELOPMENT BASED ON THE SUFFICIENCY ECONOMY PHILOSOPHY IN THAILAND

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ABSTRACT

A model village for sufficient health under the "Sufficiency Economy Philosophy" (SEP) using the Participatory Action Research (PAR) method was developed in a rural community in the middle region of Thailand. The three main concepts of SEP consisted of: moderation, rationality, and self-immunity reflecting the middle-path of living, using participatory action research methodology that included action planning, action taking, and the evaluation process. As a result, six health-related activities were initiated and performed by the villagers in the model village. The results showed that by using the PAR process in the development of a model village the SEP can be integrated into and is inseparable from daily life activities, which can influence the villagers' health beliefs and health-related practice. The lessons learned included community dynamics, reasearcher and villagers relationships, health management, and factors that contributed to successful and unsuccessful outcomes.

Keywords: Development, Economy, Health, PAR, Sufficiency, Thailand

1 INTRODUCTION

The term of "Sufficiency Economy Philosophy" or (SEP) is not new for the Thais. It is also called the King's philosophy of living. The SEP hightlights ways to balance one's life amist the rapid economic changes and social development. Thai people honor with love and respect His Majesty King Bhumibol Adulyadej as the result if more than 6 decades of his hard work in nuturing the country and its people. His Suffiiceincy Economy Philosophy targets not only economic growth, but encouraes a paradigm shift to target growth for balanced and sustainable development.

Historically, the main ideas of the Suffiiceincy Economy were deductively extracted from the King's influencial speeches in 1970 concerning the country's rapid economical transition, reminding Thai people about the impacts of modernization and rapid economic progress. The impacts of economic changes were evident at the macro level regarding national natural resources and the environment, as well as on the micro or community level (Sathirathai and Piboolsravut, 2004; Chaipattanna, 2012). His speeches were notably expanded again almost 30 years later after the economic crisis in 1997. The SEP concept pointed the way for recovering from the ecomonic impacts by living in moderation. The SEP orientation of living brought about more resilient, balanced, and sustainable development (Piboolsravut, 2010).

Information gathered by the Royal Development Study Center (1997) reveals numerus positive outcomes of the SEP through its applications such as in agriculture, business or Corperate Social Responsiblity (CRS), and in the government sector. Even though there is a

belief that the SEP is a guide to a good way of living. the application of this holistic SEP in the health development sector has been limited to a few specific health services. There is no specific health outcome derived from the SEP concepts (Chaiphibalsarisdi, Sopajaree, Nakwaree, Kasemsuk and Chaiyachet , 2006; Suthasingh, 2007; Reuangpradith, 2009).

Thus, this article aims to demonstrate a model for health development in the community by applying participartory research methodology to community health development using the SEP as an underlining framework for development.

2   LITERATURE REVIEW

2.1   Sufficiency Economy Philosophy (SEP)

World socioeconomic development has created severe problems of natural resource deterioration and environmental pollution. According to the Unitied Nations Conference on Environment and Development (UNCED) in 1992, the confernce's goal for "Sustainable Development" was established as agenda 21. Sustainable development was defined as a devlopment approach that can accomodate the physical needs of people in the present generation without compromising avalability of resources for future generations. The compelling concepts of sustainable development were considered to be conflicting between development and environmental protection (Sathirathai and Piboolsravut, 2004, p 2). Economically, development indicators include high income and high productivity in all sectors. This growth-driven development has caused increased utilization of natural resoures and environmental deterioration. However, the SEP offers a new paradigm that can minimize current development challenges and their adverse impacts on the environment. It proposes human well-being as a goal for development by developing from the inside-out by focusing more on social capital in the community.

According to King Bhumibol Adulayadej's speech in 1997, the SEP or " The Middle Path," can be used to guide ways of living at individual, community, and national levels. The following is a synthesis of the SE philosophy (Mongsawad, 2010, pp. 127–128):
> "Sufficiency" means moderation and due consideration in all modes of conduct, as well as the need for sufficient protection form internal and external schock. To achieve this, tha application of knowledge with prudence is essentials. In particular, great care is needed in the utilization and untested theories and methodologies for planning and implementation. At the same time, it is essential to strengthen the moral fibre of the nation, so that everyone, particularly political and public officials, technocrats, businessmen and financiers, adhere first and foremost to the priciple of honesty and integrety. In addition, a balanced approach combining patience preservance, deligence, wisdom and prudence is indispensable to cope appropriately with the critical challenges arising from extensive and rapid, environmental and cultural changes occurring as a result of globalization.

In brief, the essential core concepts in the SEP are:
   1) Moderation
   2) Rationality or reasonableness
   3) Self-immunity

These three interdepenent and interconnected principles can be explained as follows (Mongsawad, 2010; Chaipattana, 2005).

Moderation: Its meaning relates to a way of life in the "Middle Path". Rapid economic development can cause overindulgence on the part of many people. A person should be aware of his or her basic needs and potentiality. The middle path reminds people to live in moderation, not to extremes, and that they should be self-reliant. Living in moderation can reduce the utilization of natural resources and prevent contamination of the environment.

Rationality: The meaning here is related to analytical thinking. A person should comply all his or her knowledge and past experiences, together with his or her analytical capability to make decisions. The consequences of such decisions or actions also should be examined before hand. prior examined.

Self-immunity: This concept can be called risk-mangement and can be defined as the to protect oneself against unpredictable and uncontrollable life events. A person should try to oversee risk factors and guard against them.

Additionally, there are two conditions that add up to the success of the application of the above three principles, which are so-called "knowledge" and "morality." Each careful step of decision making and actions requires accumulated information while understanding the issue and take action for problem solving, then sustainble development will be the expected result (Mongsawad, 2010). These actions should be performed with moral principles. Here, morality refers to integrity, honesty, preserverance, and hard work. The SEP reflects the insights of Buddhist philosophy. Terms such as "The Middle Way" are used, for example, for curving personal greed and increasing good judgment and risk management (Warr, 2007). In brief, economic growths as well as the recurrent economic crisis in Thailand and other countries have caused human suffering. The SEP provides a solution for suffering, not through materialization, but within their ways of living. Its principles are focused on one's intellectual thinking and action.

2.2 Health development in the community

2.2.1 Sufficiency Health Development and SEP

The health agenda in Thailand as can be seen in the 10th National Health Plan of Thailand (2005-2011) revealed the main focus on setting up a health system for sufficiency health (SH). The six strategic plans, including health system management, health culture, healthy health personnel, risk-management, alternative medicine, and a knowledge-based health system, were developed (MOPH, 2010). This 10th National Health Plan offers implementation of the SEP at the macro level. However, its process and outcomes in terms of the application of the SEP into community health has not been systemically or clearly demonstrated. Most of the reports show the application in specific conditions and settings, such as flood relief programs, local wisdom for health, community health volunteer participation in health development, and so on (Chaiphibalsarisdi et al., 2006; Suthasigh, 2007).

Three possible causes of sufficient health (SH) development problems include: 1) lack of indicators to measure the above "Sufficiency Health," 2) more clarification of health behaviors and their outcomes based on the SEP is required, and 3) the variations of community characteristics post difficulties in application across the country. Therefore, there is a need for the development of sufficiency health indicators, behavioral outcome indicators, and a model for SEP application in the community setting.

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The three proposed sufficiency health concepts based on the SEP can be further conceptualized as follows.

- *Moderation(in sufficiency health):* Moderation in one's manner of living acccording to the "Middle Path." The moderation of health can be observed through health behaviors, such as moderation in consumming foods and excersice. For example, over eating as well as under- or problem-eating habits are the significant causes of various health problems. The "Middle Path" reminds people to consume in moderation, not to an extreme. In addition, less consumption of unneccessary foods can reduce utilization of natural resources. Futhermore, less unnesseccary food production leads to less use of chemical substances and minimizes changes of chemical contamination to the environment.

- *Rationality (in sufficiency health):* The meaning of rationality is related to analytical thinking. For health-related decision making, one should apply knowledge and past experiences, together with analytical thinking.

- *Self-immunity (in sufficiency health):* Risk-management at the individual and community level is expected. A person and his community should try to oversee risk factors and safeguard against them. Self-immunity can be defined as the ability to protect oneself against unpredictable and uncontrollable undesirable events. Prevention against accident, drug abuse, and endemic and epidemic diseases is among the common preventable community health problems.

Community partners are essential for community health development using the SEP. Health personnel work with individuals, families, and the community to achive their desired sufficiency health outcomes. Details of the "Health Sufficiency" based on the SEP are illustrated in Figure I.

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Community self-reliance in health, e.g.

Moderation in health

health behaviors and health service use in

moderation , health cost saving

Systematic

health planning

and management

by community,

using analytical

thinking.

Community

partners

Health

team

Patients

/individuals/ families

Community

participation in health

screening and

monitoring (including

environment), health

promotion,

Rationality

Self-immunity

Knowledge	Morality

Figure 1: Major concepts of Sufficiency Health (SH) based on Sufficiency Economy Philosophy

2.2.2   Participatory Action Research in Health Development

Various approaches to health development in the community have been employed in the social and health sciences. They can be a mutual collaboration approach, a technical collaboration approach, and an enhancement approach, which emphasize practical problem solving and participatory actions at the community level, or using Participatory Action Research (PAR) as a developing process (Creswell, 2005). In community health development, the PAR process empowers people to control their decisions and life styles.

This kind of collective and self reflective inquiry (PAR) is characterized by partnership among researchers and the stakeholders in the community. They work together, with consideration of history, culture, social and local context, to find solutions to improving the current situations (Baum, MacDougall and Smith, 2006).

According to Whyte (1991), PAR is the intellectual development and action that are implemented in business and agriculture in the following 3 areas: social research methodology, participation in decision making by people in organizations and communities, and oraganizational behavior. Its paradigms are based on critical theory and constructivism, whose methodology ranges from qualitative to quantitative and mixed methods (Baum, MacDougall and Smith, 2006). Recently, PAR methods haven been successfully applied in developing health behaviors in psychiatric patient care, with HIV infected persons, and so on. For example, a psychaitric disablty project engaged psychiatric disable persons as key participants or so-called "research associates". This project focuses on collaborative effort among academic researchers and the community, with provision of experience mentorship and vocational support (Delmam, 2012).

Therefore, PAR is recognized as a significant process for health development. The collaborative process using PAR enables all parties to learn from each other and improve community health. In this community health development project based on the SEP for sufficiency health using the PAR process, a collaborative process among stakeholders is essential for devloping community health or specifically, "Sufficiency Health," based on the SEP among the villagers.

3 METHODOLOGY

3.1 Sufficiency Health Model Village

3.1.1 Village background
Since 2008, "Saladin village" has been recognized as a "Sufficiency Economy Community" by the provincial authority according to the people's ways of living, especially regarding the agricultural economy based on the SEP. This agricultural community, located in central Thailand, was selected as a model village for health development since the SEP has been embedded in ways of living already existing. The main source of income of this village is from lotus, mango, coconut, and rice growing. The population was 1,459, with 795 females and 664 males. We implemented PAR activities during the village regular monthly meeting on every 5th day of the month between February 2010 and March 2011. The community leaders participated in the health development process, including the village headman (female), local authority members, local health post personnel, village health volunteers, the housewive group, the youth group, and the elderly group. There were approximately 50 persons attending each meeting. The reseracher team comprised Mahidol University professors from 2 nursing schools, the Resource and Environmental Science School, and local health personnel such as the district hospital administrator, and local health promotion hospital personnel.

3.1.2 Participatory Action Research (PAR)
The research methodology is PAR in its nature using both qualitative and quantitative methods. The methods employed for data collection were a health survey, a focus group interview, and an individual in-depth interview. The three main PAR processes used, according to Bessette (2004), were:
- *Action Planning and Diagnosis.* This consisted of the following activities:
    - Community preparation. The researchers provided information about health development and also extended their invitation to village leaders and interest groups.
    - Situational analysis and problem identification. Problem identification stemmed from the analysis of data from the short health survey collected among 120 families in the village.
    - Team development. In order to empower the community for health, a series of activities were initiated, such as providing information, study visits, and village health volunteer training for SEP based health development.
    - Action planning. After a series of 3 workshops, the villagers developed action plans for the village's sufficiency health. The researchers acted as facilitators throughout the action plan development process.
- *Action Taking.* Six months after the action plans were developed and reported at the community meeting, the villager-own projects initiated at Saladin village were: home-

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grown vegetables, community first aid, breast feeding promotion, anti-smoking/drinking, clean environment, and a community support system.

- *Evaluation*. Through reflection and validation during the project activities in the community, a model for sufficiency health development in the community was conceptualized by the reserachers' team. Later the model was reviewed by 2 experts, a sociologist and an expert from the Bureau of the Royal Household (BRH) who worked with the SEP project and made suggestions and recommendations.

4   RESULTS

4.1   Model for Sufficiency Health based on the SEP

From analysing the community health activities, it was seen that all of the activities focused on at least one of three main SEP concepts, as illustrated in Table 1. Each of the three concepts were interrelated. For example, the home-grown vegetable project reflected the concept of "moderation" as the major concept because of its cost savings, while breast feeding promotion represented the family's cost savings as well as increased the infants' immunity.

Table 1: The SEP concepts in community health projects

Community projects	Moderation	Rationality	Self-immunity
1. Clean environment	□	■	■
2. Community support system	□	□	■
3. Home-grown vegetables	■	□	□
4. Breast feeding promotion	■	□	■
5. Anti-smoking and drinking	■	□	■
6. Community first aid	□	□	■

■ major concept □ minor concept

The final revised model for sufficiency health devlopment in community in Figure 3 below shows more details of related input, process, and output.

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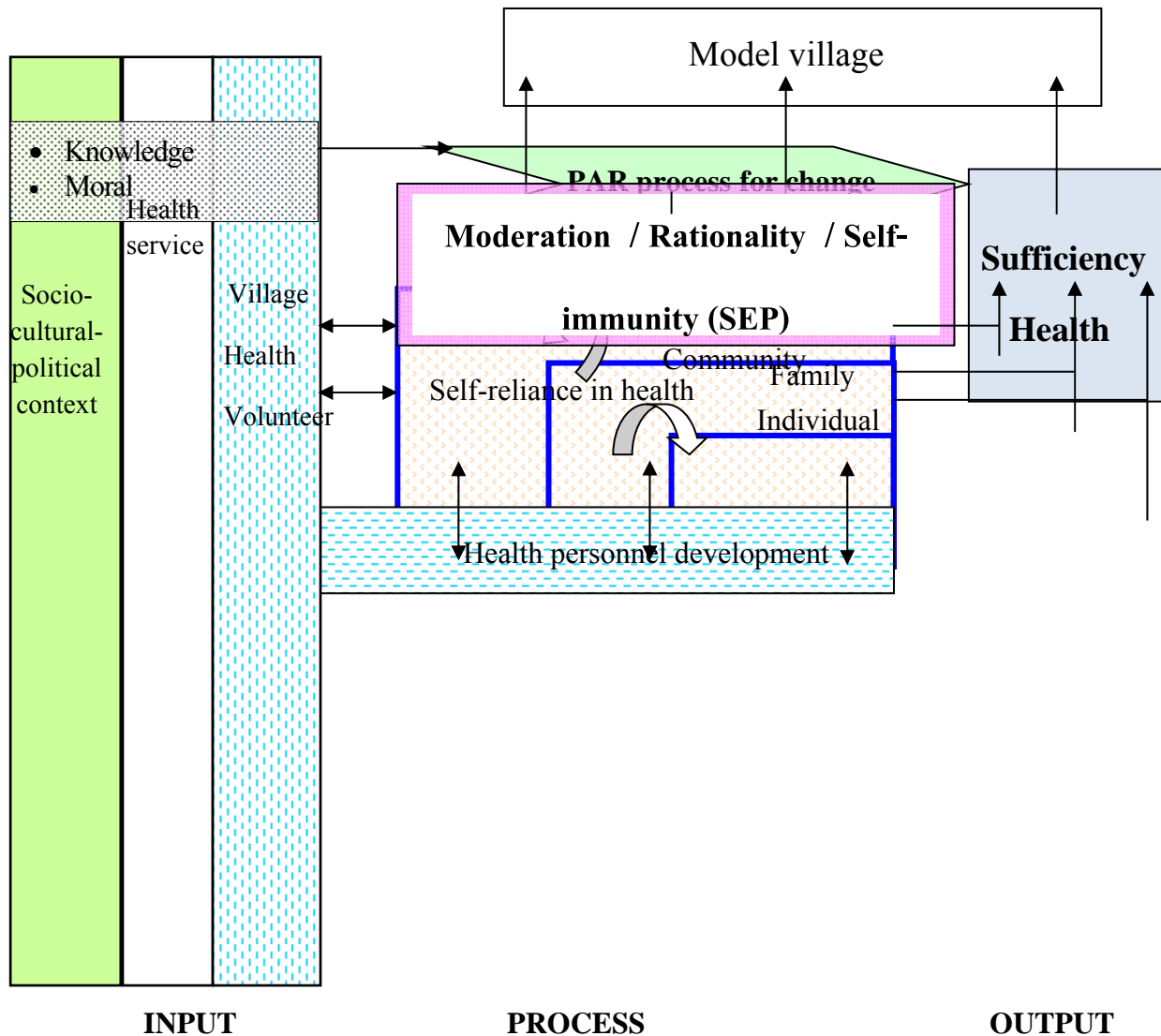
Figure 2: Model for health development based on sufficiency economy philosophy

According to figure 2, the proposed model depicts the essential process for improving community health based on the SEP. It involves community leaders, community dwellers, and local health personnel, including health volunteers. In consideration of its socio-cultural context and the health service system, the PAR process was introduced to help the community to critically analyze and develop health-related activities based on health information gathered from the village. Community dwellers participated in initiating plans for health development based on the SEP, which later were implemented accordingly. At this point, the outcomes focused on changes occurring during and after the project implementation. The study results from the focus group interview among the group of villagers one year after the project began showed positive change in communication and in the relationships among the villagers (Phuphaibul et al., 2012).

5   CONCLUSION AND DISCUSSION

In brief, the Sufficient Economy Philosophy (SEP) is the conceptual framework of this research.   The sufficient economy is a philosophy bestowed by His Majesty King Bhumibol

Adulyadej and emphasizes the middle path as an overriding principle for appropriate behavior by the population at all levels. Overall, we found that the SEP can be intergated in daily life and affects a person's health behaviors and outcomes.

The model developed from this project demonstrates a body of knowledge in developing a community with sufficient health concepts based on the sufficient economy philosophy. This model can be used as a prototype for applying the SEP in other communities. Furthermore, a follow up study is recommended to identify the changes and its sustainability.

Lessons learned from the model devlopment include:
1. Team devleopment: The most important step we took at the early stage of this project was core team development. All team members went through the process of learning more about the SEP through group discussion and provided reading on the SEP from the project leader.
2. Good community relationship: At the monthly meeting, there was an opportunity for team members to get acquited with the groups and individuals in the village. Community special events also provided informal closer connections.
3. Social capital: This close-nit community is already an SEP village, and they have learned how to work together and have had experience working with Mahidol University projects in the past.
4. Media: The most effective media used for communicating the SEP activities were personal phone calls and monthly newletters from the project team. The newletters offered information on activities, outcomes, and the names of responsible individuals and groups. It reminded the group of what needed to be done according to the plan.
5. Future research: The SEP for the SH projects should be expanded to urban community health development. Most of the SEP projects have been established in rural communities. Thus, it is suggested that the SEP for SH model be tested among the urban population later.

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POLITICAL BUSINESS CYCLES IN TRANSITION COUNTRIES, EU MEMBER STATES

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ABSTRACT

Political and economic reality in transition countries, EU member states is still quite different than in other member states. Electoral cycles in selected countries occurred in terms of EU enlargement and specified economic framework after accession to its membership as defined by mutual agreements. A change of government in the circumstances of the increasing demands for social welfare improvements and personal standards could lead to time inconsistency problem of economic policy. Moreover, after getting the mandate to form the new government such circumstances may be the reason that left-wing or right-wing parties do not implement economic policy that is announced before the election. Considering the fact that the central banker has a legislative duty to coordinate the implementation of monetary policy with the economic policy conducted by the government, he can also be in a position to threaten his primary goal - to maintain monetary stability. The research has shown that there are not political business cycles in the transition countries in the form as they are presented in developed countries. Nevertheless the result does not mean that the left or right wing parties implement a consistent economic policy after receiving the mandate to form a new government in relation to the announced economic policy before elections. One of the major factors that have influenced on this result is still unsatisfactory profile views of political parties in transition countries, because the practice of party activities often differs significantly from established programming framework. Furthermore, the determined economic guidelines of the EU do not allow political parties to conduct other government economic policy, whether they are left or right-wing. Moreover, if the EU creates stronger mechanisms for fiscal responsibility in the future, it will be a real possibility of further narrowing the choice of an alternative framework to conduct economic policy at the national level.

Keywords: *Economic policy, Inflation, Time inconsistency problem, Transition countries, Unemployment*

1 INTRODUCTION

Transition process from former socialist social system to modern entrepreneur society created a unique historical occasion for analysis of certain economic phenomena under completely different circumstances regarding the ones already existing in developed western European countries. Moreover political and economical reality of transition countries, EU members after the change of the executive power is still specific regarding other EU members so these circumstances can be a factor of different implementation of economic politics. Furthermore election cycles in analysed countries happen always under circumstances of continuous enlargement of EU as well as already set guidelines of economic politics before and after the access to membership in compliance with signed reciprocal agreements.

This paper shall first of all examine whether left or right–wing parties after receiving the mandate for composition of new government implemented such economic politics which was implemented before the elections. Changed political environment can influence on

government to adapt its economic politics to choice of different priorities namely to putting stronger impact to lower inflation or diminishment of unemployment which has impact of time inconsistency of economic politics. Election cycles can influence on different behaviour of political parties which than jeopardises their reputation for left-wing parties being more sensitive to prevention of unemployment regarding the right-wing parties namely that right-wing parties are more inflation aversive regarding the left-wing ones. Such behaviour makes the position of central banker more difficult as he is legally obliged to coordinate the implementation of monetary politics with economic politics implemented by the government which can result with the situation that a primary goal – keeping of monetary stability – shall be jeopardised.

2 TRANSITION PROCESS AND TIME INCONSISTENCY PROBLEM OF ECONOMIC POLITICS

The time inconsistency problem of economic politics has been analysed for several decades. Basically the state administration is very often in a situation to solve ex post the ex ante formulated economic politics regardless the circumstances under which it is implemented. Economic politics implemented in the moment t shall have certain limits for future period t+1. Such limits are not the same as the limits of economic politics existing in the period t+1. Due to these reasons economic actors can rationally change their behaviour to prevent the government to cheat them with their discretionary decisions. Economic politics in transition countries faces today numerous challenges in its implementation especially as with its manipulation various opportunistic aims of political parties participating in executive government are tried to be achieved. We can often witness the media performance in which the representatives of political parties in analysed transition countries before the elections announced consistent and very convergent economic politics. But as the aim of all parties is first of all to win at the elections it happened often that parties in power try to change the announced economic politics with the purpose of its adjustment to proper political and world view perspectives. Such changes can create problem also to central banker in his effort to adjust the monetary politics to new circumstances in order to keep the monetary stability.

Ideological framework of the party in power in western democracies was often brought in connection with the choose of priority in economic politics at which for the left wing-parties it was considered as if they were more sensitive for diminishment of unemployment while those right-wing were credible in implementation of economic politics in compliance with world view perspective and would often implement the politics announced before the elections also within the period after they gain the mandate for new government. It happened often though that the economic politics of left and right–wing parties in transition countries before the elections was directed towards the so called "median voter" which resulted with its convergence at ideologically different political parties.

In this paper we shall, among other things, analyse whether there is a convergence in implementation of economic politics of left and right-wing parties and whether it has long term characteristics which would have impact on parties' programmes to loose their significance but also to the possibility to choose among various political options. Though the aiming to "median voter" in multiparty environment of transition countries should not always be a rule as each political party judges its optimal location on "political market".

3 IMPLEMENTATION OF ECONOMIC POLITICS AND POLITICAL BUSINESS CYCLES

One of the important theoretical approaches that perceives the relationship between the inflation and unemployment takes into consideration the political-business cycles in view of the non ideologically loaded politicians and "short-sighted "voters. According to the mentioned theoretical consideration the implementation of economic politics at the beginning of mandate of each government would be restrictive while the expansive economic politics would be implemented before the new elections regardless the political differences of the party in power.

The theory of political business cycles and its author Nordhaus (1975) underlined the election success as the guideline of behaviour of political parties in power. Nordhaus thinks that politicians have personal interest to increase the possibility of their staying in executive power which brings again to the implementation of the same economic politics. His model presumes that the voters have "short memory" and that they reach their decisions based on the events from the direct history. Furthermore great part of public is not familiar with the existing economic legitimacy with the relationship between inflation and unemployment as especially important which is described in the best way with the Philips curve. Due to the previously mentioned politicians are interested in stimulating aggregate request before the elections cheating the voters with the so called conjecture. Manipulating with certain instruments of economic politics in order to make some economic indicators look "nicer" before the elections and the problems solved after the mandate received, politicians try to make the illusion of prosperity before the elections and before the voters realise that they are going to pay the consequences after the elections. Moreover as the consequences of such expansive politics are late in time, the inflation is to be seen after the elections done. The party in power shall try to solve the problem with the restrictive economic politics after the elections. Of course when the time of new election cycle comes the "forgetful" voters shall not remember what happened at that time and manipulation of economic politics means starts again before the new elections for the aim of encouraging of new aggregate request.

The theory of political business cycles has been additionally elaborated by bringing the elements of rational expectations that also presumes not ideological politicians but rational voters. Probably the most important authors that in that sense complemented the theory of political business cycles are Cukierman and Meltzer (1986), Rogoff (1990) and Rogoff and Sibert (1988). They confirmed Nordhaus assumptions even when the voters would not have short survey in the history. Namely the model mentioned would be correct in case the voters would be not perfectly informed about their economic environment, the aims of economic politics creators or their ability to manage economy. Moreover the complicated process of budgeting brings to asymmetric information even with some experts and not surprisingly at common not informed voters. This statement can be described in the best way by the following Alesina's (1989, pp. 55–98) sentence: "The RPBC theory is thus compatible with relatively short-run cycles of budget deficits, transfers, and money supply growth around the election date but it does not have clear implications for a longer cycle of output and unemployment."

Empirical researches of political-business cycles in transition countries were made by more authors like Pacek (1994), Bell (1997), Fidrmuc (2000), Halleberg and de Souza (2002), Akhmedov and Zhuravskaya (2004) as well as some other researches. So Pacek focused the researches to Bulgaria, former Czechoslovakia and Poland (using aggregated interregional

data) for the period of only several years namely from 1990–1992 having established the macroeconomic reasons that influenced on voters to party commitment at the elections. Fidrmuc (2000) analysed the determinants that influenced the behaviour of voters at the elections in Czech Republic, Hungary, Poland and Slovakia. The author proved that the reforms were supported by those that had some benefit from them which mainly referred to right wing parties. Contrary to that such segment of society that lost with the reforms implemented chose left wing parties. Halleberg and de Souza (2000) in their research concluded that transition countries in the process of access to EU had political business cycles having taken into their calculations also the cash flow trends and budget deficit.

Akhmedov and Zhuravskaya (2004) established the existing of political business cycles in Russia having taken into consideration the trends of cash flow before and after the elections. Maurel (2006) proved the magnitude of fiscal manipulation or deficit grow in elections years at many EU member countries but indicated also that it does not appear in middle and central Europe transition countries. She also proved that the fiscal manipulation in east Europe transition countries is not greater that in other European countries. Bell (1997) analysed the economic reasons for political commitment of voters at the elections in Poland underlying the diminishment of unemployment. Treisman and Gimpelson (2001) analysed the political business cycles in Russia. Authors explain that the expectations are closely linked with the actual macroeconomic data. Brender and Drazen (2005) measured the empirical data for the existence of a political budget cycle in new opposed to traditional democracies. They show political deficit cycle as a phenomenon of new democracies. Of course some other authors that effectuated the researches of political business cycles could be quoted.

4   MODEL APPLIED AND ITS PRESUMPTIONS

Countries analysed during the transition process had only several election cycles. Although the transition process had no equal dynamic and success achieved, transition countries that became EU members have doubtlessly a series of reciprocal connections that make them one special group of countries suitable for certain economic researches. In this paper we added to these countries namely Lithuania, Latvia, Estonia, Poland, Czech Republic, Slovakia, Slovenia, Hungary, Bulgaria, Romania and also Croatia as future EU member. In researching paper we start from the presumption that the liberalization of market during the initial few transition years measured by cumulative liberalization index was not at the birth level in the countries analysed it was logical to include in the research the period from 2001–2011 when the transition process left birth pangs. In this way we included the time period in which the inflation and the unemployment rate could have been measured in "market" conditions of business.

We added the data on unemployment and inflation to appertaining years depending on the fact whether left or right-wing parties were on power. We divided the mandates of left and right wing governments at the initial two years period after the forming of a new cabinet and second period of the last two years after the forming of a new cabinet. Of course this division could have been different in time but we started from the presumption that these are new democracies that need more time for profilation as well as stability in economic politics implementation.

Furthermore though the transition countries central banks are independent in implementation of monetary politics, this in reality is not a limiting factor in our researches due to the fact that these are also legally obliged to coordinate the implementation of monetary politics with

economic (fiscal) politics implemented by the government without jeopardizing its primarily goal – stability of prices. In essence our research is based on Phillips curve with the possibility of choice between the inflation and unemployment rate:

$$y_t = \alpha y_{t-1} + \gamma(\pi_t - \pi_t^e) + \varepsilon_t, \qquad 0 < \alpha < 1, \qquad \gamma < 0$$

which would with elements of rational expectations look like this:

$$y_t = \bar{y} + \gamma(\pi_t - \pi_t^e) + \mu_t$$

where y_t is the output growth rate , π_t inflation rate , π_t^e expected inflation rate , μ_t level of politicians ability for keeping of low level of unemployment with relatively low inflation rate and $\bar{y}$ is the balanced (steady-state) output growth rate .

5 INFLATION AND UNEMPLOYMENT IN FIRST MANDATE OF LEFT AND RIGHT WING PARTIES

During the analysed period in the first two years of mandate of EU members transition countries governments (including Croatia) we had total of 37 cases when we added to right wing parties the data for inflation, the thing that we did for left-wing governments in 26 cases. The trend of inflation in left and right political environment during the first two years of mandate of transition countries governments has been clearly shown in Chart 1.

Chart 1: Inflation in first two years of mandate left and right wing partie
(WEO, own calculation)

Inflation at the left-wing governments in the first two years of mandate was average 5,72% while at the same period the right-wing governments had somewhat lower inflation rate that was 4,72%. Furthermore it is also clear that median inflation rate at the left-wing governments was 4,21% while at the right-wing government it was almost identical 4,1%. Range of the inflation rate was significantly higher at the left-wing governments and moved from the

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minimum of 0, 2% to the highest amount of 34,5% while at the right-wing governments it moved from the minimum of 1,0% to the highest rate of 15,3%. Standard deviation at the right wing governments inflation was 3,07 while the standard deviation at the left-wing governments was higher and amounted 7,32 which proves their higher dispersal within the period analysed.

Also during the first two years of mandate of EU members' transition countries (including Croatia) we had total of 37 cases when we added the data for unemployment to right-wing governments which we did with left-wing governments in total of 26 cases. The unemployment trend during the first two years of mandate of transition countries in left and right political environment has been clearly shown in Chart 2.
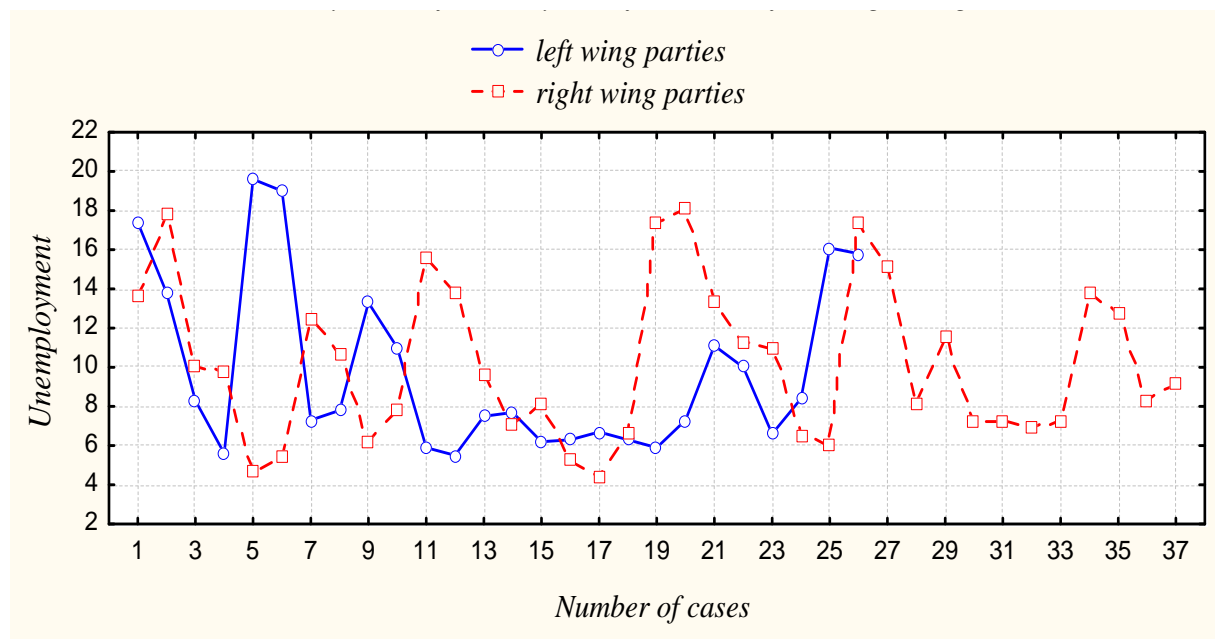
Chart 2: Unemployment in first two years of mandate left and right wing partie (WEO, own calculation)

Unemployment at left-wing governments during the first two years of mandate amounts average of 9,86% while at the same time period the right-wing governments had somewhat higher unemployment rate of 10,2%. Furthermore it is clear that unemployment rate median at left-wing governments amounted 7,75% while at right-wing governments was again higher namely 9,6%. Unemployment rate range at left and-right wing governments was almost similar. Namely at left-wing governments it moved from the minimum of 5,5% up to the highest of 19,6% while at the right-wing governments it moved from the lowest rate of 4,4% up to the highest of 18,1% . Standard deviation at unemployment at right-wing governments amounts 4,0 while standard deviation at unemployment of left-wing governments was higher namely 4,47.

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Table 1: Multiple Regression Results: Inflation and unemployment during the first two years of left wing governments mandate 2001–2011 (proper calculation)

Dependent: Var2	Multiple R = 0,27699468		F = 1,994452	
R2= 0,07672605			df = 1,24	
No. of cases: 26	adjusted R2= 0,03825630		p = 0,170712	
Standard error of estimate: 4,384536648				
Intercept: 10,829236669	Std.Error: 1,099506	t(24) = 9,8492		p = 0,0000
Var1 beta= - 0,28				

In case we examine interdependence between inflation and unemployment rate during the first two years of mandate of left-wing parties power in transition countries using the previously explained theoretical considerations their slighter negative correlation link shall be evident. It is also clear that the central banker implemented monetary politics that to smaller extent supported priorities of left-wing executive governments putting greater weight on prevention of unemployment regarding the inflation. Such monetary politics, as we have already seen, had as a consequence somewhat higher inflation rate at the left-wing governments related to the executive power by right-wing parties.

Table 2: Multiple Regression Results: Inflation and unemployment during first two years of mandate of right wing parties 2001–2011 (proper calculation)

Dependent: Var2	Multiple R = 0,18960135		F = 1,305121	
R2= 0,03594867			df = 1,35	
No. of cases: 37	adjusted R2= 0,00840435		P = 0,261035	
Standard error of estimate: 3,984604031				
Intercept: 11,371727151	Std.Error: 1,213010	t(35) = 9,3748		p = 0,0000
Var1 beta= - 0,19				

In case we examine interdependence between inflation and unemployment rate during the first two years of mandate of right-wing parties power in transition countries using the previously explained theoretical considerations their slighter negative correlation link shall be evident. It is also clear that the central banker implemented monetary politics that to smaller extent supported priorities of right-wing executive governments putting greater weight on prevention of unemployment regarding the inflation. This is by all means interesting as the primary goal of central bank is keeping the monetary stability so right-wing parties' government with its economic politics that has similar goals should make easier implementation of monetary politics of their countries central banks and such correlation is insignificant.

6   INFLATION AND UNEMPLOYMENT IN SECOND HALF OF MANDATE OF LEFT AND RIGHT WING PARTIES

During the time period observed in the last two years of mandate of EU members' transition countries (including Croatia) we had total of 29 cases when we added the data for inflation to right-wing governments, the thing that we did for left-wing governments in totally 26 cases. Inflation trends in left and right political environment in the last two years of mandate of transition countries has been shown in Chart 3.

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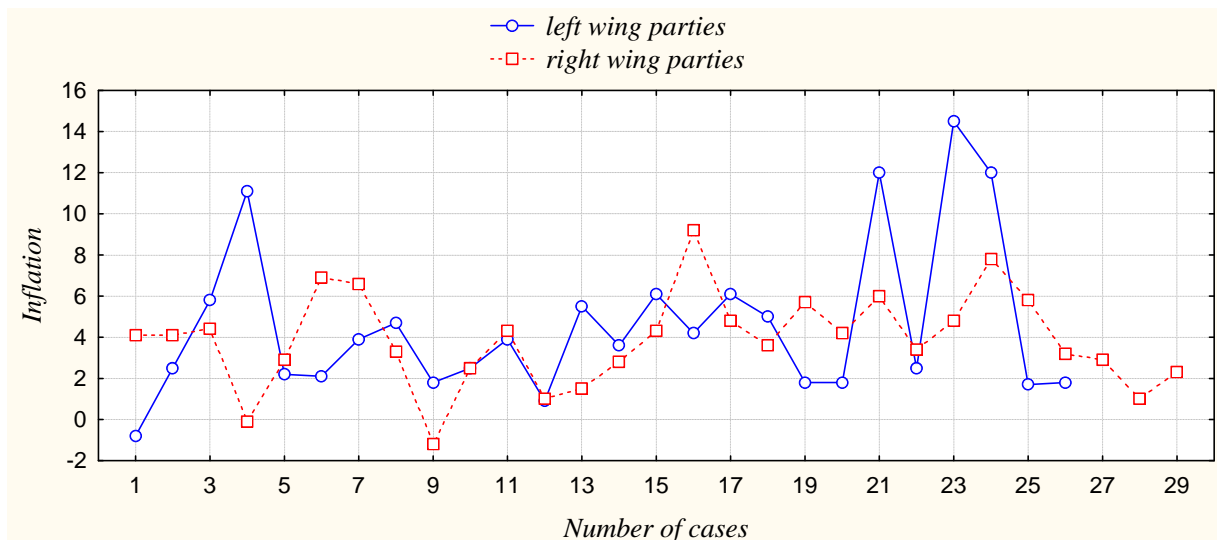
Chart 3: Inflation in last two years of mandate left and right wing partie
(WEO, own calculation)

Inflation at left-wing government in the last two years of mandate was an average of 4,58% while at the same period right wing governments had somewhat lower inflation rate that was 3,86%. Furthermore it is clear that inflation rate median at left-wing government was 3,75% while at the right-wing governments it was somewhat higher namely 4,1%. Inflation rate range was higher at left-wing governments and was from the minimum of 0,8% to the highest of 14,5% while at the right-wing government it moved from the minimum of -1,2% up to the highest of 9,2%. Standard deviation of inflation at right-wing governments amounts 2,29 while standard deviation of inflation of left-wing governments was higher namely 3,83 from which their dispersal within the period observed can be seen.

Also during the last two years of mandate of EU members transition countries governments (including Croatia) we had totally 29 cases when we added to right-wing governments the unemployment data, which we in case of left wing governments we did in 26 times. Unemployment trends during the last two years of mandate of transition countries governments in left and right political environment is clearly shown in Chart 4.

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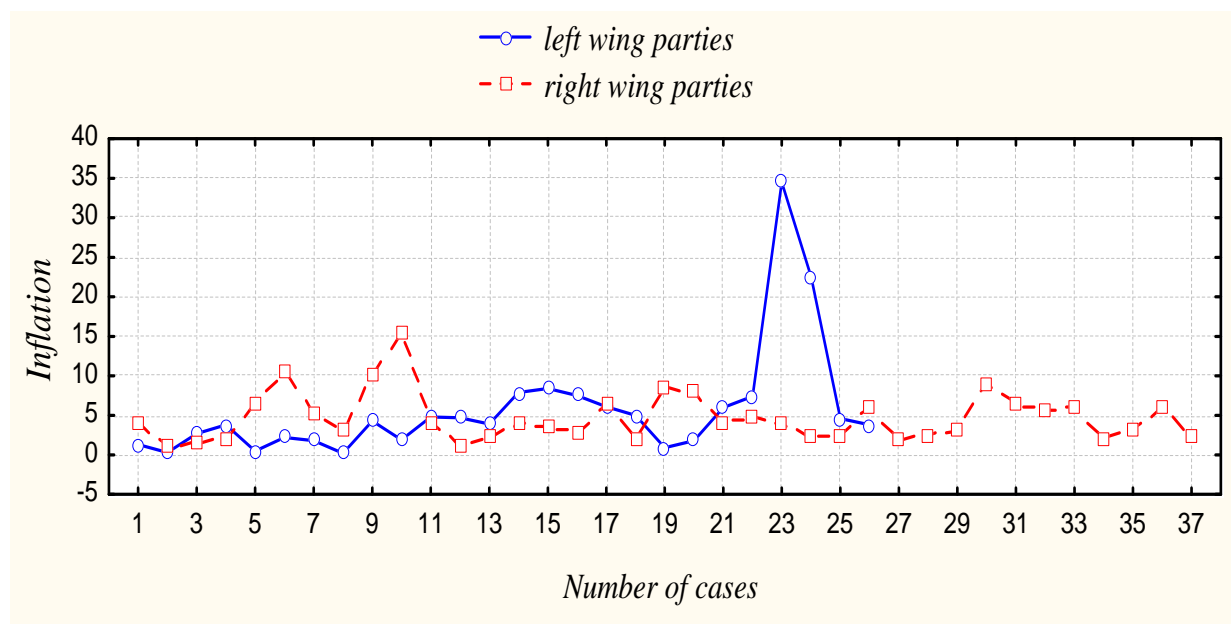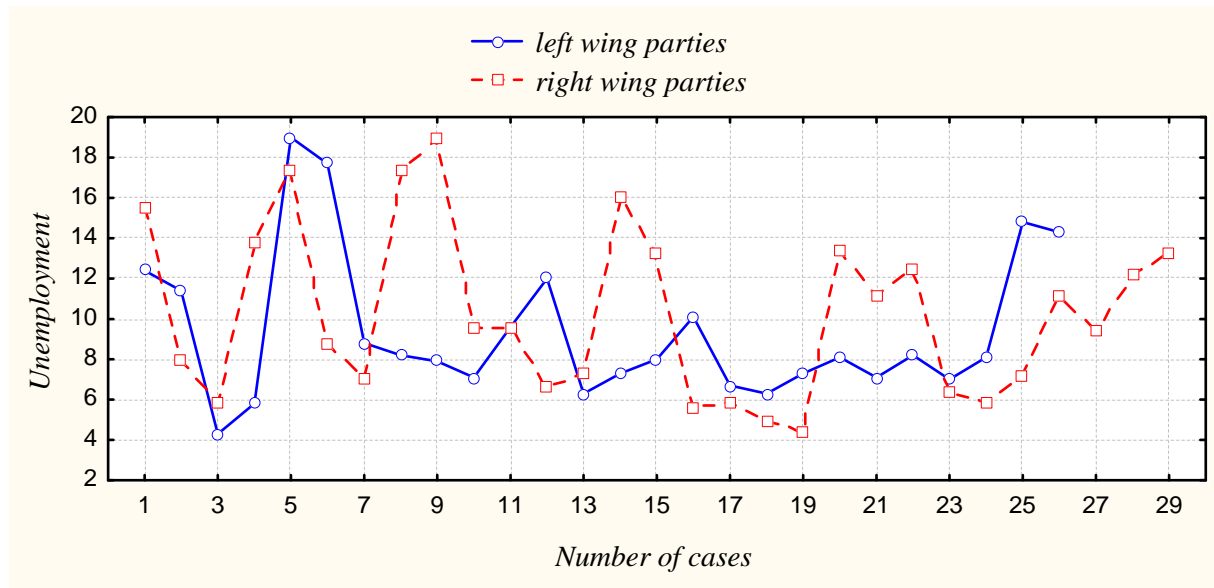*Chart 4: Unemployment in last two years of mandate left and right wing parties
(WEO, own calculation)*

Unemployment of left-wing governments in the last two years of mandate is an average of 9,38% while in the same period right-wing governments had somewhat higher average unemployment rate of 10,3%. Furthermore it is clear that the unemployment rate median at left-wing governments was 8,1% while at the right-wing governments it was 9,6%. Unemployment rate range at left and right-wing governments was almost equal. At left-wing governments it was from the minimum of 4,3% up to the highest of 19,0% while at the right wing governments it moved from 4,4% up to the highest measured of 19,0%. Standard deviation of inflation at right-wing governments amounts 4,21 while standard deviation of inflation of left wing governments was lower namely 3,67.

*Table 3: Multiple Regression Results: Inflation and unemployment in the last two years of
mandate of left wing parties 2001–2011 (proper calculation)*

Dependent: Var2	Multiple R = 0,48504897		F = 7,383728	
R2= 0,23527250			df = 1,24	
No. of cases: 26	adjusted R2= 0,20340885		p = 0,012020	
Standard error of estimate: 3,271865911				
Intercept: 11,505475958	Std.Error: 1,012594	t(24) = 11,362		p = 0,0000
Var1 beta= - 0,49				

In case we examine interdependence between inflation and unemployment rate during the last two years of mandate of left-wing parties power in transition countries using the previously explained theoretical considerations their significant negative correlation link shall be evident. It is also clear that the central banker implemented monetary politics that supported priorities of left-wing executive governments putting greater weight on prevention of unemployment regarding the inflation. Such monetary politics had as a consequence as we have previously seen, an average higher inflation rate at left-wing governments regarding the executive power of right-wing governments.

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Table 4: Multiple Regression Results: inflation and unemployment in the last two years of mandate of right wing parties 2001–2011 (proper calculation)

Dependent: Var2	Multiple R = 0,53614992		F = 10,89244
R2= 0,28745674		df = 1,27	
No. of cases: 29	adjusted R2= 0,26106625		p = 0,002718
Standard error of estimate: 3,617461174			
Intercept: 14,093244755	Std.Error: 1,335762	t(27) = 10,551	p = 0,0000
Var1 beta= - 0,54			

In case we examine interdependence between inflation and unemployment rate during the last two years of mandate of right-wing parties power in transition countries using the previously explained theoretical considerations even higher negative correlation as opposed to one at left wing governments shall be evident. It is also clear that the central banker implemented such monetary politics that supported priorities of right-wing executive governments putting greater weight on prevention of unemployment regarding the inflation. As the central bank primarily goal is keeping the monetary stability and the right-wing governments with their economic politics support such priorities, central bank in the second half of right-wing governments mandate had significantly easier task.

7   CONCLUSION

Election cycles in EU members' transition countries happen under circumstances of enlargement of EU as well as already set economic frameworks after the access to membership. The change of executive power in circumstances of greater and greater request for increase of social welfare and personal standard can be the reason for left or right-wing parties after receiving the mandate for new cabinet do not implement such economic politics as announced before the elections. Time inconsistency of economic politics implemented by the government can make the position of central banker that is linked by law to coordinate the implementation of monetary politics with such economic politics even more difficult so that he can be in a position to jeopardize its primarily goal- keeping of monetary stability.

With the research effectuated we have established that in transition countries analysed there are no political business cycles in a way they are present in western countries. Such a result of research does not mean that left and right-wing parties implement consistent economic politics before the elections. One of the main factors that had impact on such a result are still not sufficient distinctiveness of political parties in transition countries as the praxis of party activities very often vary from the set programme framework. Also the economic guidelines set by EU do not allow the parties on power to implement different economic politics regardless they are left or right-wing. Moreover in case EU in future makes stronger mechanics of fiscal liability according to already set criteria there is a real possibility of further narrowing of frameworks for the choice of alternatives in implementation of economic politics at national level.

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MANAGING FOREIGN SUBSIDIARIES IN FRENCH MULINATIONAL CORPORATIONS

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ABSTRACT
Nowadays, it is essential for a multitude of companies to engage in foreign markets. However, the successful management of internationalization processes constantly poses numerous novel challenges. The attempt of this paper is to provide guidance on the multiple and complex requirements of international business activities. Authors provide empirical assessment and theoretical elaboration on the headquarters-subsidiary relationships phenomena which must be observed in international management practice. Foreign subsidiaries can add considerable complexity to the management of multinational corporations because they are located in different countries which may show varying degrees of psychic, administrative and cultural distance to the home country. But, subsidiaries are also involved in local business networks and therefore may develop different ideas since they have the approach to the diverse sources of knowledge. Multinational corporations have the potential to combine organization-specific advantages with advantages of different geographic locations through the internal transfer of resources. Since the authors' interest lies in the relationship between headquarters and foreign subsidiaries, the focus here will be on the last form of internationalization. In the theoretical part of the paper authors illustrate the relationship between headquarters and foreign subsidiaries, the roles and assignments that headquarters have towards foreign subsidiaries and vice versa. Empirical research focuses on subsidiary roles in headquarters-subsidiary relationships and it is conducted in subsidiaries of French multinational corporations in Croatia. The emphasis is to identify whether the traditional relationship changed - from the control that was the fundamental activity done by headquarters - towards the contemporary relationship where the subsidiary is an important node within the intra-organizational network of multinational corporation.

Keywords: Croatia, French multinational corporations, Headquarters and foreign subsidiaries relationship, Multinational corporations, Subsidiary's role

1 INTRODUCTION

A multinational (respectively transnational) corporations are companies which (a) possess business entities in two or more countries, regardless the legal form and scope of activities of the entity, (b) have a decision-making system that enables coherent policies and a common strategy coordinated from one or multiple centres of decision making, and (c) the entities are linked through ownership and other relationships in such a way that one or more entities may affect the activities of other entities, especially the sharing of knowledge, resources and responsibilities towards others" (UNCTAD, 2002). A parent enterprise (Headquarters) is defined as an enterprise that controls assets of other entities in countries other than its home

country, usually by owning a certain equity capital stake. A foreign affiliate is an incorporated or unincorporated enterprise in which an investor that is a resident in another economy owns a stake that permits a lasting interest in the management of that enterprise (UNCTAD, 2008).

Multinational corporations require a large market which they realise by the internationalization of their (business) activities. Their prime objective is a presence in the global market that is achieved through the network of the subsidiaries. In the headquarters-subsidiary relationship there are many roles and assignments that headquarters have towards foreign subsidiaries and *vice versa*. The most important role of the subsidiaries lies in the fact that the headquarters conquer the market straightforwardly through them. Subsidiary's role in the corporation can be defined by the headquarters or it can be developed by the subsidiary's managers. This paper will present the role of subsidiaries considering different factors that can affect their operations.

In theory, as well as in the practice of multinational corporations, it is known that the developing countries, because of the unsaturated market, cheaper labour and many other favourable conditions, present a very interesting area for the settlement of multinational corporations. That is the reason why, in the last 20 years, many multinational corporations, from Europe and from all over the world, have been investing in Croatia where they established subsidiaries through which its products are successfully placed in the Croatian market. In this paper, a particular attention is paid to the French multinational corporations in Croatia. France is, in fact, after Austria, the Netherlands, Germany, Hungary and Luxembourg, the sixth largest country in foreign direct investments in the Republic of Croatia and its direct investment amounted to 1383.5 million Euros, in the period since 1993. until mid 2012 (www.hnb.hr).

In Croatia there are 70 French subsidiaries (with more than 10% of French participation in the equity) with a total of 7,000 active employees, of which, 3% in the agricultural sector, 32% in industry and 65% in the service sector (http://www.ambafrance-hr.org). This is a good reason to explore the specificities of the French management and to pay more attention to the French subsidiaries management in the Croatia. Therefore, in the empirical part of the paper are presented results of the research conducted in subsidiaries of French multinational corporations in Croatia about the French subsidiaries management and their relationship with the headquarters.

2 THEORETICAL INSIGHT ABOUT THE HEADQUARTERS-SUBSIDIARY RELATIONSHIPS

Chang, Gibbons and Schoch (2000, p. 648) pointed out that during the process of internationalization, headquarters-subsidiary relationship is affected by various factors:
1. subsidiaries' size
2. subsidiaries' location
3. cultural similarities of subsidiaries' and the headquarters' cultural environment
4. communications between the headquarters and subsidiaries.

All these factors, to some extent and in some way, affect the headquarters-subsidiary relationship. Their influence is mostly manifested by a greater or lesser degree of subsidiary's autonomy.

Autonomy is a „critical point" in the subsidiary-headquarters relationship. It is conditioned by numerous factors and it also affects directly to the subsidiaries performance in local conditions. In other words, to adapt to local conditions, the subsidiary requires a certain degree of autonomy. Except the specified, subsidiaries' degree of autonomy is also affected by subsidiaries goals and strategies, tasks and technologies, it's size, the life cycle of a subsidiary, location, human resources and specific environments of certain countries. For an analysis of subsidiary autonomy, it is important to consider its relationship with the headquarters. According to the traditional way of thinking, there are two basic types of relations between headquarters and subsidiaries, which are centralized and decentralized approach (Galbraith, 2000).

For the centralized approach it is characteristic that the most important decisions are made in the headquarters' level. According to that, managers in the subsidiaries don't have a high degree of autonomy. They only implement decisions according to the instructions given by the headquarters. In such corporations hierarchies are elaborated in detail, as well as the lines of authority and types of delegations at various levels of the corporation, which makes it rigid. The opposite of the centralized approach is a decentralized approach which transmits subsidiaries' control and management from headquarters managers to subsidiaries' managers. In that case subsidiaries have a higher degree of autonomy and managers make important decisions related to the subsidiary's operations, which acquires a greater degree of flexibility (Bartlett, Ghoshal and Beamish, 2008).

Although subsidiaries are legally independent units with their own tangible and intangible assets, they still operate as „departments" that are more or less controlled by the headquarters (Chang and Hong, 2000, p. 430). Therefore, one of the key activities of managers in the headquarters is controlling and monitoring subsidiaries' activities, especially those located in foreign countries. Formal verification provides effective control of the subsidiary, and thus obtained information allow the headquarters to evaluate subsidiary's efficiency and effectiveness as well as those of their managers. Another possibility to monitor subsidiary's operations is the implementation of knowledge, goods and capital (Chung, Gibbons and Schoch, 2000, p. 650). This can not be seen as exclusive indicator since subsidiary's ability should also be adding value and adopting knowledge and new concepts from the environment. Coordination mechanisms are systems designed to ensure that the necessary degree of integration is achieved between the activities of all subsidiaries (Johnston, 2005, p. 124). They are concerned with the subsidiary's multilateral relationships with other subsidiaries as well as with the subsidiary's specific relationship with headquarters. They are usually related to the flows of resources, intermediate products, knowledge and information.

Financial management of multinational corporations has very important tasks of financial planning and control, investment decision-making and raising funds to finance the corporation. Multinational corporations have a specific financing system that is different from the financial system of all "national" companies. The advantage of these systems is reflected in the abilities of transferring capital and profits through internal mechanisms of global systems that enable a more favourable financing, a wider range of risk exposure and the use of an internal funding for better liquidity management. It is a complex system which includes an international trade, manufacturing and finance, which requires ingenuity and a variety of knowledge and skills for successful financial management of these complex entities.

3 SUBSIDIARY TYPES CONSIDERING THEIR ROLES TOWARDS HEADQUARTERS

If we observe the development of multinational corporations and their strategies, we will notice that each strategy implies certain roles and assignments of the subsidiaries and an appropriate organizational structure of the corporation. Subsidiary's role in the corporation can be defined by the headquarters or it can be developed by the subsidiary's managers (Hodgetts, Luthans and Doz, 2006). Numerous studies have attempted to give the answer to the question of subsidiary's roles and assignments within the corporation. Most of the studies consist of multiple classifications of subsidiary roles. These studies are based on analyzes in a particular business context or they result from the use of one of several conceptual models such as IR (integration-responsiveness) grid (Rugman and Brewer, 2001).

White and Poynter thus, identified three main scopes as dimensions in their model:
- market scope
- product scope
- value-added scope

By installing product scope and value-added scope on one dimension, and market scope on the second dimension, they were able to generate five basic subsidiary types:
- "The strategically independent" subsidiary operates as an independent company. This kind of subsidiary has the largest degree of autonomy and independence in making decisions. It possesses its own resources and it is not restricted by the headquarters in finding opportunities in existing or new markets.
- "The product specialist" with similar characteristics as the previously mentioned type of subsidiary, except that the relationship with the headquarters is more intense which results by a lesser degree of autonomy. The headquarters provides resources to this subsidiary but it is independent in developing it's own business.
- "The marketing satellite" is most characterized by low degree of autonomy and limited value-adding effect. Usually, it is not involved in production of the final product and its main purpose is to represent and / or sale headquarters' products in a particular market.
- "The rationalized manufacturer" is a subsidiary that produces intermediate products which are built into the final products. It has a very low degree of autonomy (but is highly integrated in the corporate activity.
- "The miniature replica" is producing products /providing services from a headquarters' range of products in the local market. This type of subsidiary is a "miniature headquarters" which aims to operate as a local company in a particular market but the autonomy of its managers is very low.

Jarillo and Martinez (1990) based their model on the dimensions of degree of global integration and the degree of localization (Johnston, 2005, p. 58). Their study set three types of subsidiaries:
- "The receptive subsidiary" corresponds on high integration and low localization degree. These are globally integrated subsidiaries characterized by the lower degree of autonomy and greater connections with the headquarters and other subsidiaries within the corporate network.

- "The autonomous subsidiary" corresponds to a low degree of integration and a high degree of localization. It has a high degree of autonomy and it generates a significant local operations.
- "An active subsidiary" is characterized by a high degree of integration and a high degree of localization, and presents a very important link in the multinational corporation network.

Bartlett and Ghoshal (1995) also mapped subsidiary's role on the basis of competence of the local organization and the strategic importance of the local environment, which produced four subsidiary roles:
- "Strategic leader" has a high degree of local authority and the market in which it operates has significant strategic importance for the corporation. This kind of subsidiary is seen as a partner of the headquarters.
- "The contributor" has considerable capability but it acts in a minor market. It has to be encouraged to contribute its capability for the benefit of the entire corporation instead of remain locally focused
- "The implementer" is a subsidiary that has low values of both dimensions, but also has enough competence to maintain local operations
- The "black hole" has a position in an important market but lacks competence to deliver more value to the corporation. The task of this subsidiary is to manage its transformation to strategic leader status.

Gupta and Govindarajan (1991) introduced a new perspective on subsidiary task based on knowledge flows. They proposed a framework with high and low values of outflows and inflows of knowledge between the subsidiary and the rest of the corporation which resulted by four subsidiary tasks:
- "A local innovator" is characterized by low knowledge in both directions. Innovation autonomy and a specific knowledge resulted in a high degree of independence
- "The global innovator" is charged with innovating on behalf of the rest of the corporation. There are generally a specialized functions or areas or it can comprehend the entire research and development function. Global innovator has a high outflows and to and low inflows from the rest of the corporation network.
- "The integrated player" implies responsibility for creating knowledge but at the same time it doesn't have a self-sufficiency in its own deeds. Consequently, inflows and outflows are both high
- "The implementer" characterised by low outflows of knowledge to the rest of the corporation but high inflows of knowledge from the headquarters and other subsidiaries.

Ability to acquire knowledge from the environment is not only important for the effectiveness of the subsidiaries, it is also important for the entire corporation as it enables the transfer of knowledge in the headquarters and in other subsidiaries. It is easier for the subsidiary to adopt knowledge and concepts if it is in direct relation (if it is close to) with the local environment, its suppliers and customers. Local knowledge-adoption can be useful for subsidiaries operations in the local market thanks to which it can locally improve its effectiveness.

It is evident that in all the above models, the autonomy appears as a „critical" variable. Some important business determinants such as speed, method and scope of the local market depend

of the degree of autonomy. If the degree of autonomy is not appropriate, in certain markets that may pose a major obstacle to the successful operations of the subsidiary.

The role that the subsidiaries have in the corporation network may change over time. Once established, a foreign subsidiary can be developed, raised in the hierarchy of the group to achieve a greater degree of responsibility and autonomy, and, according to the achieved results, it can completely change from the original strategy. However, there are also subsidiaries that don't generate positive results which makes their existence unjustified and according to that, they show need to be lifted.

4   EMPIRICAL RESEARCH

In order to research cultural differences and the degree of autonomy of French subsidiaries in the Republic of Croatia, a primary research was conducted during October and November of 2012. The research was conducted on a target group whose task was to fill out a questionnaire. The target group consisted of managers of French subsidiaries in the Republic of Croatia because they represent the group that makes and implements business decisions and policies, and they are also in a direct contact with the headquarters. The sample was deliberate and appropriate; a sample of acquaintances, and it included 11 managers of French subsidiaries in Croatia. The measuring research instrument was a questionnaire, which investigated the management styles, cultural differences as well as *headquarters-subsidiary relationship which* was determined by the autonomy degree of the subsidiary's business functions.

Most of the surveyed managers (55%) were in the age group of 41 to 50, slightly fewer of them (45%) were younger, 31 – 40 years old. Also, most of them (64%) work on a higher management level whereas a smaller part (36%) works on a middle level, closer to the top management of the subsidiary.

Most managers (73%) stated that the headquarters is setting the goals and business strategy of the subsidiary. Subsidiaries of multinational corporations, therefore, rarely make strategic decisions, but their managers are actively involved in the decision-makings for the subsidiary.

When asked how high, on a scale from 1 to 5 (1 lowest, 5 highest), the subsidiaries degree of autonomy is in terms of business functions, managers gave the following answers:

Table 1: Subsidiaries' business functions' degree of autonomy

Human resources management	1	2	3	4	5
	0%	18%	64%	18%	
Marketing	1	2	3	4	5
	0%	9%	45%	36%	9%
Sales and/or production	1	2	3	4	5
	0%	9%	9%	64%	18%
Finance	1	2	3	4	5
	27%	45%	18%	9%	0%

The results show that the highest degree of autonomy for subsidiaries lies in the field of sales and production, which also includes the level of autonomy in setting goals and sales quota,

determining prices, determining special sales prices for certain customers, As well as the degree of autonomy in choosing business partners, canals of distribution etc. The middle level of the subsidiary's autonomy was assessed with 3, and it refers to the human resources management function which comprehends the possibility of an organizational restructure, degree of autonomy in determining tasks and workplace definitions and functions, responsibility for hiring and firing employees as well as determining the income and bonuses for employees. The marketing function that refers to the responsibility for determining the market scope, advertising, content of advertising and the selection of marketing agencies, the possibility of processing standard products as well as the adjustment to local needs also has a pretty high autonomy in most subsidiaries. Finally, the least degree of autonomy is seen in the business function of the Finances, which includes the autonomy of accounting procedures and financial planning, the purchase of additional equipment or the replacement of the existing one, determination of the target rate of return, loan policies and receivables. This leads to the conclusion that the headquarters still has the majority of control of its subsidiaries through the finance function, and that the finances are the best instrument for implementing and maintaining control over subsidiaries.

The research showed that most of the surveyed managers apply a democratic leadership style while much fewer believe their own style to be autocratic. The survey also revealed that the managers of French subsidiaries spend most of their time leading and motivating employees and organizing, they devote a lot of their time on planning and controlling, and the least time on managing human resources.

Table 2: Organizational aspects in subsidiaries

How often do you consult your associates while making decisions?	
Often	Sometimes
73%	27%
Decision making in the subsidiary is:	
Centralized	Decentralized
73%	27%
Is there a rigid hierarchical structure with clear lines of authority in the subsidiary?	
Yes	No
73%	27%

These results are in agreement with the fact that France is a country with an emphasized hierarchic system and centralization in business as well as in other fields. The business positions and its appropriate levels of authority, power, and responsibility are therefore clearly defined with existing functional lines of responsibility.

The research also revealed that collectivistic and "male" cultural values dominate in most French subsidiaries.

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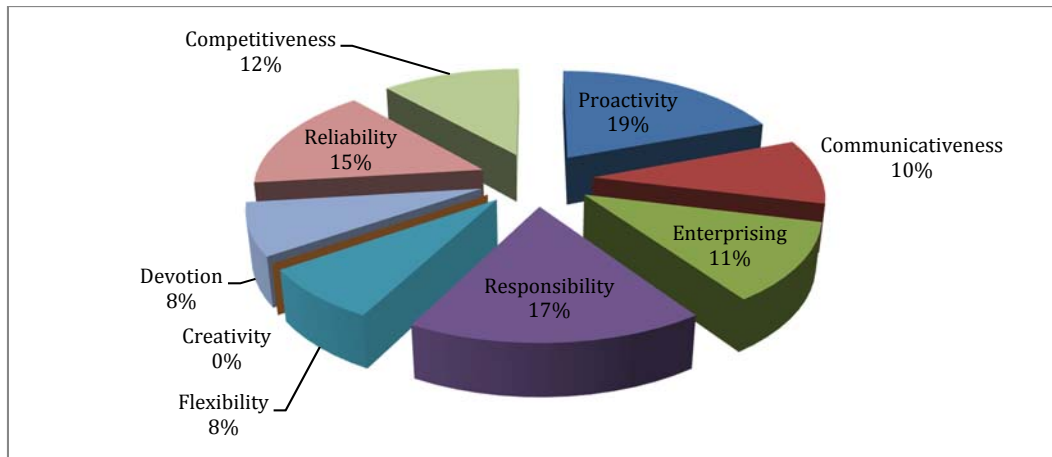
Chart 1: Main characteristics of employees in French subsidiaries

When asked how important it is that their employees understand French, equal number of managers (35%) answered that it is desirable and unimportant, 18% indicated that it depends on the function of the employee, while 9% thinks it is important. The fact is that nowadays, multinational corporations all over the world use English as their official language. The results of this research reveal that French managers in Croatia, to some extent, still believe that it is important for employees in certain positions to speak, or at least understand French language. This confirms the well-known devotion of the French to their language.

As for the meetings, the managers stated that they mostly hold meetings for 2 reasons: in order to discuss and exchange ideas about ongoing activities and for the purpose of making decisions. The results confirm the idea that the French hold meetings in order to exchange information and events rather than to achieve a consensus or make a decision.

Finally, 63% of managers state that a formal form of communication prevails in the company, while 37% indicates that informal communication is the main form of communication in the subsidiary.

Regarding the degree of cultural distance, the biggest percentage of managers (55%) graded (on a scale 1 to 5) the difference in the business culture of Croatia and France with 3. A certain percentage of managers (27%) thinks that the degree is higher and graded it with 4 or 5, which indicates a high or very high degree of cultural distance, while only 18% of managers thinks that the degree is lower and graded it with 2.

On the other hand, when it comes to the success of the implementation of the organizational culture from the parent organization to the subsidiary, on a scale of 1 (unsuccessful) to 5 (very successful), 45% of managers graded it with 3 and the same number graded it with 4, whereas 10% showed a negative attitude about it and therefore graded it with 1. According to this information it can be concluded that the implementation of the French organizational culture in Croatian subsidiaries is pretty successful.

5   CONCLUSION

The headquarters-subsidiary relationship in multinational corporations is based on different roles and assignments that the subsidiary has towards the headquarters and *vice versa*. The assignments that the headquarters have towards subsidiaries are the control and coordination

of the subsidiary's activities within the corporative network. Also, the headquarters has the important role of knowledge management within the corporation whereas the subsidiaries assignment is adopting and sharing knowledge with the rest of the corporative network. Besides that, subsidiaries have to maintain a certain degree of autonomy within the corporation so they can successfully conduct business activities in the local market.

The headquarters-subsidiary relationship is also influenced by numerous factors that could be the size or geographic distance of the subsidiaries as well as cultural elements of its surroundings. Their influence on the relationship between the subsidiary and the headquarters is mostly visible through changes of the subsidiaries degree of autonomy.

The interrelationship of certain „dimensions" or factors that may affect subsidiaries operations brings different roles that subsidiaries can have and thus different "Types" of subsidiaries within the corporation.

The empirical part researched the levels of autonomy of French subsidiaries in Croatia as well as the differences in business practices between Croatia and France that may affect the headquarters-subsidiary relationship.

Given the dimensions that can affect the subsidiaries operations, it is evident that the theme concerning the role of subsidiaries in multinational corporations is very complex and important subject. That is why more attention should be given to this specific subject, in practice as well as in scientific research, especially in smaller economies. Considering that leadership styles and practices differ from one country to another, and that these styles are transferred from headquarters to the subsidiaries, it would be interesting to compare the headquarters-subsidiary relationships of European or American corporations with the ones from the countries in transition and developing countries in order to detect differences in subsidiary treatment and headquarters-subsidiary relationship between different multinational corporations.

Finally, unlike the traditional headquarters-subsidiary relationships where the control function was the fundamental activity, nowadays there is one other very important element in this relationship – the knowledge transfer (or Management). Considering the new corporate policies that encourage the creation and dissemination of knowledge within the corporation, one can say that in the *contemporary* headquarters-subsidiary *relationship,* the knowledge is the most important link between the entities of a multinational corporation.

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SOCIAL ENTREPRENEURSHIP AND CORPORATE SOCIAL RESPONSIBILITY IN SLOVAKIA

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ABSTRACT
Combating poverty and social exclusion is a priority for all Member States of the European Union. The need to strengthen social inclusion, reduce the risk of social exclusion and maintain employment growth has declared the Lisbon Strategy and its follow-up strategy document Europe 2020. These ambitious goals can achieve only by mobilizing all the unused capacity of the economy. The European Research Network - EMES notes that the welfare state is gradually changing to mixed welfare state, where the responsibility is shared between the three sectors of the economy. Solutions to the social problems of society increasingly involve the public institutions, traditional businesses focused on profit and different actors of the third sector. In the area of deteriorating social conditions and employment opportunities third sector organizations have their place. They create mechanisms through which individuals can participate in the activities of civil society. The third sector is developing in areas where the public nor the private sector cannot or for some reason does not want to ensure sufficiently meet the needs of citizens. It is also expected to increase of corporate social responsibility of the traditional business community. Corporate social responsibility is gradually gaining wider acceptance and application in daily practice. Corporate responsibility includes social and environmental considerations into the conduct of the company. The functioning of socially responsible companies approaching the concept of social economy, and their values and goals are very similar. It has developed also a new and innovative business in the area of social economy, which prefers social goals to profit. In developed economies of the European Union, this "hybrid business model" has worked successfully, that why it has merit greater recognition and support in Slovakia.

Keywords: *Corporate Social Responsibility, Social economy, Social entrepreneurship, Social exclusion, Unemployment*

1 INTRODUCTION

The concept of Corporate Social Responsibility and the concept of social entrepreneurship have a lot of characteristics in common; however, significant differencing in their implementation shall be pointed out. Among the initiatives of the social economy we count only those that mandatorily prioritise its social mission or social goal to gaining profits and they work according to principles of commercial business. Socially responsible company is an entity operating in the private sector as a classical profit oriented company integrating on a voluntary basis (beyond the statutory obligations) in its day to day decision making social and environmental aspects and interactions with all other involved parties.

2 CORPORATE SOCIAL RESPONSIBILITY

Corporate Social Responsibility (CSR) is gradually gaining wider acceptance and applicability level in daily practice also in Slovakia. It represents the implementation of social and environmental aspects into business decision-making and acting.

Amongst the first definitions of the social responsibility belongs the definition contained in the book: Social Responsibility of the Businessman in the USA, from 1953. In this book, the social responsibility is specified as a commitment of the entrepreneur to take such decisions or to negotiate in a way desirable in terms of objectives and values of society.

So called Carroblov's four-piece definition of the CSR is based on the principles in the following areas (Doležalová, 2005, pp. 29–74):
1. Economic responsibility.
2. Legal responsibility.
3. Ethical responsibility.
4. Voluntary responsibility.

The interest of the European Union for the concept of a socially responsible company started in the 90`s of the 20th century, especially for seeing it as a tool to achieve sustainable development. The first European definition of the social responsibility is laid in the Green Book (2001), which constitutes an optional integration of social and environmental aspects into day to day business operations and interactions with other involved persons. It means a voluntary, not mandatory nature of corporate social responsibility.

An important milestone in the global development of corporate social responsibility was given also by the origination of the international network named Global Compact, initiated by the United Nations in 2000. It covers NGOs, UN agencies and representatives of companies with a common goal to promote principles (10) of corporate social responsibility in the following areas (Bussard, Marček, Markuš and Bunčák, 2005, p. 14):
  ➢ Human rights:
    1. Companies should foment and respect the protection of fundamental human rights.
    2. Companies should ensure not to participate in any way in its infringement.
  ➢ Working standards:
    3. Companies ought to respect freedom of association and acknowledge the right for the collective bargaining.
    4. Companies should eliminate all forms of forced labour.
    5. Do not allow to abuse the child labour.
    6. Companies should eliminate the discrimination at work.
  ➢ Environment:
    7. Companies should foment the environmental protection.
    8. Companies should support initiatives promoting responsible approach to the environment.
    9. Companies should support the development and dissemination of environment-friendly technologies.
  ➢ Fight against corruption:
    10. Companies should act against corruption in all its forms, including blackmailing and bribery.

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According to socially responsible behaviour the companies shall have in mind the interests of all involved parties. They develop its activities ethically in respect to all market participants (competitors, shareholders, customers and suppliers), working place (employees, management and unions), within the community (local self-governments, state administration, local community) and to environmental protection.

Social responsibility of the companies means voluntary effort of business entities beyond the legal obligations in order to achieve social and environmental goals. Such companies do not seek only the profitability, but include within its interests impacts on the environment and local communities. These objectives are reflected in the so-called triple expressing of the economic results (Bussard, Markuš and Olejárová, 2005) - or triple bottom line according to the Green Book.

Nowadays, the principles of socially responsible enterprising are becoming adopted more and more by the companies in Slovakia. The evidence is given by the interest of companies for the prestigious prize Via Bona Slovakia, awarded annually by the Points Foundation for the best projects in the field of the corporate philanthropy and CSR.

Interested parties can subscribe to different categories:
- The Main Awards: responsible large company for 2012 (more than 250 employees), responsible small or medium company of 2012 (up to 250 employees).
  The main prize for the large company is awarded for the complex and exceptional attitude to responsible enterprising in relation to management of the social responsibility, controlling the impact for the environment, the implementation of ethical principles, taking care of employees, responsible operating on the market and influence of the company on the community.
  Responsible small or medium company should present itself by application of the principles of responsible business practices in at least 2 of the following areas: responsibility to employees, community, environment, market and ethics.

- Area of Corporate Social Responsibility: green company, excellent employer, pro-customer oriented company.
  The Green Company Award can be granted to the business entity having carried out unique project in the area of the environmental protection, being known for the reduction of adverse influences of its operation to environment, elimination of impacts to climate changes, economical and efficient use of energies and materials, protection of biodiversity, reservations, endangered fauna and flora, involving of interested parties and creating of partnerships with the third sector entities.
  The Excellent Employer Award shall promote company fomenting an equal opportunities on the working place, employee training, harmonization of work and family life and creating good working conditions also in relation to remuneration and evaluation of the employees.
  The Pro-Customer company is represented by the exceptional approach to the customers related to care taken of them, communication and claim solving methods, introducing the innovative and responsible products and services and quality in managing its operation.

- The Corporate Philanthropy Area: good community partner and promoter of the volunteering activities.

A Good Community Partner Award is granted to the company applying a strategic approach to donations (partnerships creation, the extent of donations, incentives for support - charitable assistance, investments to the community).

For the Promoter of Volunteering Activities Award can apply the company fomenting its environment not only financially but also by dedicating the time of his employees and supporting the volunteering activities.

With an effect from 3rd December, 2012 the above mentioned initiative has become the part of European program of awards for responsible entrepreneurship. Two nominated companies will have the opportunity to represent our country on a European competition of winners in June, 2013. Evaluation will be carried out for the partnership projects among companies and non-profit organizations in the category: Partnerships of small and medium businesses and Partnerships of large companies.

Given the fact that a socially responsible company supports a local development it often enters into partnerships aimed to solve common problems. Exactly partnerships between sectors are considered to be a driving force and effective source utilization in local development.

3   THE PARTNERSHIP AND THE SOCIAL ENTERPRISES

The cooperation of the third sector and the business entity can have different forms: assignation of 2% from the corporative tax, corporate donations and sponsorship, charity marketing, campaigning, strategic partnerships.

The possibility to assign 1% and later 2% of the corporative tax has existed since 2004 (for individuals already since 2001 – possibility to assign 1% of the tax paid in 2002 for the previous fiscal period) and most companies use this form to help the third sector entities. The total amount paid as a percentage share of the corporate tax paid by the companies is increasing every year.

The corporate donations are realized by providing its own resources for public purposes without any reciprocal service. Often we see the cooperation of non-profit organizations and companies in the form of sponsorship, where the third sector organization provides the company with the opportunity of advertising and promotion. Some companies support also voluntary activities of its employees.

The standard for community investment is an internationally used methodology to measure CSR, i.e. the support of the community by the business entity. Four forms of donation are monitored within this methodology: providing funding, time, gifts in kind and costs incurred during these activities. Comparing inputs and outputs gives the company the exact amount invested to support a local community. This methodology is gradually implemented also by the companies in Slovakia and Czech Republic.

Operation of the Social Economy Enterprises is approaching the concept of the social responsibility and its values and goals are very similar.

The Social Enterprise is considered to be the business entity acting in competitive environment of goods and services, primarily employs physically or socially disadvantaged persons and its main purpose is not the profit maximization but a culture of giving (added

social value) and social incorporation of its employees. A potential profit essentially reinvests into development of its socio-economic objectives (Korimová, 2007).

The Confederation of European social Firms, Employment initiatives and social Cooperatives CEFEC defines the Social Enterprise by the following characteristics:
1. Social Enterprise is established with aim to employ disabled people or those other way disadvantaged in the labour market.
2. It is a business entity using its own market oriented production of goods and services to fulfil its social goals.
3. Most of employees are people with disabilities or other handicaps.
4. Every employee is paid the market wage or salary corresponding to his work.
5. Working conditions are the same for a disadvantaged employees as well as the rest of the staff.
6. All employees have the same rights and obligations.

The entities of the social economy react with innovative solutions to problems of the community. They provide its services especially to disadvantaged people, marginalized groups or to citizen gathered with common social goal. We divide them into social enterprises that meet its social mission:
- By providing services related to reducing or solving the social issues of the community.
- By creating jobs for disadvantaged applicants (so called Social Enterprises of working integration).

There are many initiatives successfully operating in Slovakia, however only Social Enterprises as the tools of active labour market policies are receiving the legal and financial support. Social Enterprises seek to solve long-term unbalance in the Slovak labour market, reflected in major issues, such as significant regional disparities in unemployment (5% - 30%), high rate of unemployment amongst young people with the age of 15 to 24, a high portion of long-term unemployment (unflattering first place within the countries of European Union), high number of job seekers with low education and lack of qualified working force for some specializations.

According to the Employment Services Act with an effect from 1st September, 2008 the Social Enterprise is considered to be the legal or natural entity that (The Act No. 5/2004):
- To the extent of at least 30% of its total headcount employs people being disadvantaged job seekers before accepting the job.
- Help these employees to find a job in the open labour market.
- After deduction of all expenses for its operation, uses at leas 30 % of its income to create new jobs or to improve working conditions.
- Is registered in the register of Social Enterprises.

These entities have the option to utilize a contribution to support and maintain jobs in the Social Enterprise at a maximum extent of 50 % of the total labour costs calculated on the basis of the average wage in the economy of the Slovak Republic for the first to third quarter of the calendar year preceding the calendar year in which the contribution is granted. Should the particular employee fail to get a job in the open market within 12 months, the Social Enterprise has the right to ask to prolong the provision of the contribution for another 12

months to the maximum extent of 40% of the total labour costs calculated as in the previous case.

The category of social entrepreneurship includes also protected workshop or sheltered working place having at least 50% of its employees the people with disabilities. The employer may apply for different contributions to support the employment of those persons: contribution to job creation, contribution to renewal of the technical value of tangible assets, contribution to cover operating costs and contribution to transport of employees with disabilities.

As the indirect support of sheltered workshop and Social Enterprises employing persons with disabilities we can consider awarding the contracts with the purpose to fulfil the obligatory share of employment of persons with disabilities under the law.

An employer who employs at least 20 employees has the obligation to employ people with disabilities in the number of 3.2% of the total headcount, provided the Office of Labour, Social Affairs and Family has such applicant in his evidence. Employing the person with disability with a decrease of earning capacity to the extent of more than 70% is counted as if employing three people.

Failing to meet the share of employment of people with disabilities leads to the obligation of the employer to pay the levy for the failure in the amount of 0.9 times of the total labour costs calculated on the basis of the average wage of the employee in the economy of the Slovak Republic for the first to third quarter of the calendar year preceding the calendar year in which he should fulfil this obligation. The employer does not have to pay this penalty in the case of ordering products or services from protected workshop or protected working place or from employer whose employees – people with disabilities have been involved in manufacturing such products and providing such services.

4   CONSLUSION

Progress in development of Corporate Social Responsibility and social economy in Slovakia is very slow. Companies accepting the CSR principles receive more attention and support as the activities carried out in the area of social economy. It would be desirable to adopt comprehensive legislation related to both concepts regarding the definition of the operating criteria, statistical reporting and financial incentives. There is an increase of social responsibility expected in achieving the inclusive growth not only in the case of entities prioritising the social goal, but the civil sector and the business community as well.

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PREDICTING HELMET USE INTENTION AND BEHAVIOR DURING MOTORCYCLE RIDING OF THAI ADOLESCENTS[1]

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ABSTRACT

Preventing health risk behaviors of people is the important way to meet the sufficiency health leading to health cost reduction, especially during adolescence phase. Helmet use consistently has been shown to reduce motorcycle crash-related injuries and deaths and universal helmet laws require all motorcyclists to wear helmets whenever they ride. This study, one of seven projects investigating health risk behaviors of Thai adolescents, sought to determine the ability of Ajzen's Theory of Planned Behavior to predict helmet use behavior during motorcycle riding via examination of 7th-9th grade Thai students' attitudes, subjective norms, perceived behavioral controls and helmet use intention. Ajzen's Theory of Planned Behavior postulates the more favorable the attitude and perceived subjective norm, the greater perceived behavioral control, the stronger one's intention will be to perform a given behavior. During a series of 3 data collection phases (elicitation study, pilot study and final data collection-actual study) data were obtained, through use of a research developed Demographic Data Questionaire and a Helmet Use Assessment Questionaire, and analysed by way of descriptive statistics and hierarchical multiple regression. Results revealed only 29.1% of the subjects used helmets during motorcycle riding within the previous month. Regression analysis demonstrated the explanatory power of the Theory of Planned Behavior, in that social norm, perceived behavioral controls, and helmet use intention predicted 6% of variance of their helmet use behavior during motorcycle riding. Interesting, subjective norms explained 22% of variance in their helmet use intention during motorcycle riding within the next 30 days.

Keywords: Adolescents helmet use intention, Helmet use behavior, Theory of Planned Behavior

1   INTRODUCTION

Each year many people die, or are injured or disabled as a result of road traffic crashes, and millions more are injured or disabled. In many low-income and middle-income countries, users of two-wheelers especially motorcycle make up more than 50% of those injured or killed on the road (http://www.nhtsa.gov/FARS; http://www.fhwa.dot.gov/policyinformation/statistics/2010/vm1.cfm). Head injuries are the main cause of death and disability among motorcycle riders and also passengers, and the costs of head injuries are high because they frequently require specialized medical care or long-term rehabilitation (http://www-

nrd.nhtsa.dot.gov/pubs/811208.pdf; Croce, Zarzaur, Magnotti and Fabian, 2009, pp. 390–394). Most of the these are preventable and helmet use consistently has been shown to reduce motorcycle crash-related injuries and deaths and universal helmet laws require all motorcyclists to wear helmets whenever they are riders or passengers. In the United States, economic costs saved in states with a universal helmet law were, on average,$725 per registered motorcycle, nearly four times greater than in states without such a law ($198). Although approximately $ 3 billion in economic costs were saved as a result of helmet use in 2010 (Centers for disease control and prevention, 2012, pp. 425–430).

In Thailand, though motorcycle-related, accidents and deaths are common and account for a substantial proportion of injuries related to motor vehicles, motorcycle riding is still a popular means and used as the main vehicle for all-purpose transportation among youth in Thailand. Preventing health risk behaviors of adolescents such as non-helmet use behavior during motorcycle riding is one of the important ways to meet the sufficiency health and leading to health cost reduction, because helmet use consistently has been shown to reduce motorcycle crash-related injuries and deaths. Though in 1992, the Royal Thai government introduced a law that required all motorcycle riders to wear helmets. Despite the enactment of the law, large numbers of motorcycle riders can be seen throughout the country riding without wearing a helmet. Thus, in order to develop strategies to increase Thai adolescent helmet use, There appears to be a need for health care providers and society to better understand their beliefs regarding helmet use during motorcycle riding.

2   THEORETICAL FRAMEWORK

Ajzen's (1991, pp. 179–211) Theory of Planned Behavior(TPB) is a model for predicting and explaining a given behavior. The TPB was based on Ajzen and Fishbein's previous theory, the theory of resoned action. This theory was developed in 1982 by including perceived behavioral control which influenced by Bandura's theory of self efficacy. According to Ajzen's human intention and behavior, are based on one's attitude toward the behavior, subjective norms, and perceived behavioral control (http://www-unix.oit.ummass.edu/ajzen/tpb.diag.html). Attitude toward a behavior is the degree to which performance of the behavior is positively or negatively valued. It is viewed as the belief that outcomes of one's behavior and evaluation of the ensuring outcomes are the basis for development of either a favorable or unfavorable attitudes toward any given behavior. Subjective norm is the perceived social pressure to engage or not to engage in a behavior. On the other hand, it is seen as the belief that the normative expectations of others, and one's motivation to comply with such expectations. Perceived behavioral control refers to person's perceptions of his ability to perform a given behavior. Thus, the more favorable one's attitude and subjective norm, and the greater one's perceived behavioral control, the stronger is one's intention to perform a given behavior. One's intention to perform behavior, according to the TPB, is assumed to be the antecedent of behavior. The TPB has been found to predict a variety of risk behaviors, such as alcohol consumption (Huchting, Lac and LaBrie, 2008, pp. 538–551), condom use (Fazekas, Senn and Ledgerwood, 2001, pp. 103–117), and breast self exams (Mason and White, 2008, 946–955).

Although a number of studies regarding helmet use during motorcycle riding among various populations have been undertaken, no related studies use of TPB and no studies among Asian populations especially Thai adolescents. Therefore, based upon prior research and lack of studies regarding helmet use during motorcycle riding among Thai adolescents, this research sought to examine the predictability of attitudes, subjective norms, and perceived behavioral

control on helmet use during motorcycle riding of 7th to 9th grade adolescents both as the riders and as the passengers.

3   METHOD

Design: This study is one of seven projects investigating health risk behaviors of Thai adolescents, which consisted of three phases of data collection: phase I: an elicitation study, using focus group interviews, phase II: a pilot study to test the instrument developed as a result of the elicitation study, and phase III: phase of data collection of the actual study, a cross-sectional survey design, using the instrument tested in the pilot study.

Ethical consideration: Prior to data collection, this study was approved by the Ethical Committee on Human Research, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, and the principals of the schools used as data collecting sites.

All potential subjects recruited for the three phases of the study were given consent- assent form, and a written information sheet which addressed about : the purpose of the phase of the study in which a student would be involved; the approximate amout of time involved to participate; the fact that participation was voluntory; confidentiality and anonymity issues; and, the right to withdraw without repercussions. Students desiring to take part in any one of the three phases of the study were asked to return their signed consent and assent forms to their respective classroom teachers within one week. Parents or legal guardians were also asked to sign the consent forms and adolescents were asked to sign the assent forms. Those who did not return the sign assent and consent forms, within one week, were excluded from the study.

Sample and settings: Selection criteria for subjects, in all three phases of the study, consisted of being a 7th – 9th grade Thai student from metropolitan Bangkok, central, northern, northeastern, and southern regional areas of Thailand, enrolled in purposively selected schools under the direction of the Office of the Commission of Basic Education. Schools were used as data collection sites, for both the elicitation study and actual study, were the same ten schools which consisted of six urban schools (one from each of the four regions and plus two from metropolitan Bangkok), and four rural schools (one from each of the four regions). For the pilot study, ten schools within the same five geographical areas used for the elicitation study and the actual study, were purposively selected. To prevent cross-contamination of data between the pilot test and the actual study, the schools used in the pilot test were not the same as in the actual study.

For the first phase: the elicitation study, 100 students (10 per school) were purposively selected to participate in focus group interviews. These students were not involved or enrolled in any other parts of the study. Finally, a total of 102 students (25 seventh graders, 42 eighth graders and 35 ninth graders) willing to participate in this part of study. They included 65 (63.7%) from urban area and 37 (36.3%) from rural area, 58 (56.9%) females and 44 (43.1%) males.

For the second phase: the pilot study, 651 students (64.1% from urban area; 35.9% from rural area) were purposively selected. Of those students, 651 (161 seventh graders, 268 eighth graders, and 222 ninth graders) agreed to be in this phase of the study. They included 346 (53.1%) females and 305(46.9%) males.

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For the third phase: the actual study, 900 students (90 per school), who had not participate in any other phases of the study, were purposively selected. A total of 677 (response rate = 75.2%), seventh grade (n=161; 23.8%), eighth grade (n=268; 39.6%) and ninth grade (n=222; 32.8%). 417 students (61.6%) came from urban area and 234 students (34.6%) came from rural area. They ranged in age from 12 to 16 years of age (mean=13.7 yrs.) and, most of them had a grade point average below 3.0 (n=354; 52.3%) on a 4.0 scale. Most of them were Buddhist (n=639; 94.4%) and female (n=371; 54.8%), came from a family with a monthly income less than 20,000 baht / $666 USD (n=448; 66.2%). Most of their mothers (n=361; 53.3%) and fathers (n=320; 47.3%) had received 6 years or less of formal education.

4   POCEDURE

On the first phase: the elicitation study: The Adolescent Helmet Use Assessment Questionnaire (AHUAQ) was developed from the concepts of the Theory of Planned Behavior, by using data obtained from focus group interviews. Each 60-90 minute focus group was held at ten study-site schools and audio-taped. The focus groups included 9-11 students who responded to open-ended questions which developed by researcher regarding the adolescents' attitudes to helmet use, subjective norms, perceived behavioral control and intention to use helmet during motorcycle riding. Categories and examples of the open-ended questions included: attitudes to helmet use, ("What are the benefits you will have if you use helmet during motorcycle riding?"); subjective norms ("Who are the significant persons effecting your helmet use behavior during motorcycle riding over the next 30 days?"); perceived behavioral control ("What will drive you to use helmet during motorcycle riding over the next 30 days?"); and, intention ("Do you intent to use helmet during motorcycle riding over the next 30 days?").

Content analysis was used to category the data that obtained from the focus group interviews, and also literature review. Then the first draft of the AHUAQ was developed. It consisted of 5-parts (a total of 42 items) that assessed each adolescent's: attitudes toward helmet use (17 items); subjective norms (9 items); perceived behavioral control (14 items); intent to use helmet (1 items); and helmet use behavior (1 items). Findings from the focus group interviews revealed the importance of measuring, via two categories (supportive and prohibitive), the beliefs (subjective norms) of the relevant referent both individuals and groups (i.e. father, mother, parents, cousins, traffic polices, friends, and teachers) that influenced helmet use behavior during motorcycle riding of adolescents.

The draft of the AHUAQ was reviewed by a panel of experts on pediatric nursing to assess the content validity of the instrument. Suggestions were made to modify the language of the instrument in order to make more appropriate to use with adolescents. The instrument was refined and returned to the experts twice more, after they agreed on the final version which remained a 5-part, 42-item questionnaire that was used to assess each adolescent's: attitudes toward helmet use (17items); subjective norms (9 items); perceived behavioral control (14 items); intent to use helmet (1 item); and, helmet use behavior (1 item).

The second phase: the pilot study: The final version of the AHUAQ was pilot tested with 651 subjects (161 seventh graders, 268 eighth graders, and 222 ninth graders) who were not involved in any other parts of the study. The AHUAQ and a demographic data sheet were administered to the students in their respective classrooms. Instructions regarding how to complete the questionaires were provided. No identifying marks were permitted on questionaires. Results of the pilot test of the AHUAQ showed a good internal consistency of

attitudes toward helmet use (α=.86), subjective norms (α=.92); and, perceived behavioral control (α=0.85). Exploratory factor analysis was used to examine the construct validity of the final version of the AHUAQ, and the pilot study suggested the AHUAQ was valid and reliable. Therefore, no changes were made in the questionaires in the final phase of the study.

The final/actual phase of the study: this phase, 677 students from ten selected schools were administered two questionnaires (Demographic Data Questionnaire and AHUAQ) in their respective classrooms. Students were instructed how to; complete the questionnaire; be honest in their responses; place the completed questionnaire in the provided envelopes. The students took about 20-30 minutes to complete all of the questionnaires.

Instruments: The instruments of this study consisted of 1) <u>Demographic Data Questionnaire (DDQ)</u>, and 2) the <u>Adolescent Helmet Use Assessment Questionnaire (AHUAQ)</u>.

<u>Demographic Data Questionnaire (DDQ)</u> contained 10 items to obtain information regarding each subject's such as the regional area of residence, name of school, grade level, age, gender, grade point average, religion, mother's and father's level of education, and monthly family income.

<u>Adolescent Helmet Use Assessment Questionnaire (AHUAQ)</u> consisted of five parts: 1) attitude toward helmet use, 2) subjective norms influencing helmet use /non-helmet use behavior, 3) perceived behavioral control, 4)intention to helmet use, and 5) helmet use behavior.

Attitude toward helmet use: Attitude toward helmet use was measured by 17 parallel items that assessed each subject's beliefs about the likely of helmet use behavior and evaluation of these outcomes. The belief items addressed each respondent's ideas about helmet use (i.e. "Helmet use makes me lose my hair's shape.") Possible responses for the belief items included 1="strongly disagree" to 5="strongly agree". For the parallel outcome evaluation items, statements such as "Lose my hair's shape is _____" required the provision of words, ranging from 1= "very bad" to 5= "very good," to complete the statement. The total attitude score was calculated by multiplying each belief score by its parallel outcome evaluation score, summing the multiplied scores across items and dividing by 17. Possible scores ranged from 1 to 25, with higher scores indicating a more favorable attitude toward helmet use behavior during motorcycle riding.

Subjective norms influencing helmet use /non-helmet use behavior: Supportive and prohibitive prohibitive subjective norms were assessed by way of 9 items. An example of a supportive norm, with respect to a referent person, was: "If I use helmet during motorcycle riding, traffic polices will be _____". An example of a parallel prohibitive norm item was: "If I do not use helmet during motorcycle riding, traffic polices will be _____". Possible responses to both the supportive and prohibitive norm items were 1 = "very unsupportive" to 5 = "very supportive." The total subjective norm score was calculated by multiplying the score for each supportive norm item by the score for its parallel prohibitive norm item, summing the multiplied score across items and dividing by 9. The Possible range of total scores for subjective norms (supportive and prohibitive) was 1 to 25. A high score suggested high perceived social norms in favor of, or against, helmet use behavior.

Perceived Behavioral Control (PBC): Perceived behavioral control was measured by 14 items that examined control belief strength and control belief power that influenced (i.e. facilitated or impeded) helmet use behavior during motorcycle riding. An example of a control belief strength items was: "It is _____ to use helmet during motorcycle riding when I am in hurry." Possible responses to control belief strength items were 1 = "much more difficult" to 5 = "much easier." An example of a parallel control belief power item was: "The likelihood that I will be in hurry within the next 30 days is _____." Possible responses to control belief power items were 1 = "most unlikely" to 5 = "most likely." The total PBC score, which could range from 1 to 25, was calculated by multiplying the score for each control belief strength item by the score of its parallel control belief power item, summing the multiplied scores across items and dividing by 14. High PCB scores reflected a high level of control belief over helmet use behavior.

Intention to use helmet : Intention to use helmet during motorcycle riding was measured with 1 item ("I expect I will use helmet during motorcycle riding in the next 30 days) which had possible responses of 1 = "definitely will not use helmet" to 5 = "definitely will use helmet." A high responses score suggested a high intention to helmet use during motorcycle riding within the next 30 days.

Helmet use behavior: Helmet use behavior was measured by one self-report item that requested, over the last 30 days, the number of helmet use during motorcycle riding.

The internal consistencies of the various parts of the AHUAQ, for the final phase of data gathering (actual study), were found to be similar to those identified in the pilot study. They included: attitude toward use helmet (α=.86), subjective norm (α =.92), and perceived behavioral control(α =.85).

Data analysis: Descriptive statistics were used to analyze the demographic data and item responses to the AHUAQ. Hierarchical multiple regression analysis was conducted to: identify the best predictors (attitude toward use helmet, subjective norm, and perceived behavioral control) of intention to use helmet during motorcycle riding within the next 30 days; and, identify the best predictors (intention, attitude toward use helmet, subjective norm, and perceived behavioral control) of helmet use behavior during motorcycle riding over the past 30 days.

5   RESULTS
Descriptive statistics: Most of subjects had the experience of motorcycle riding include both as riders and as passengers (83.2%). Results also revealed only 29.1% of the subjects used helmets during motorcycle riding within the previous month. Descriptive statistics of the variables (attitudes, subjective norms, perceived behavioral control. Intention, and helmet use behavior) are shown in Table1.

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Table 1: Attitude, subjective norm, perceived behavioral control scores and intention to helmet use within the next 30 days (n=677)

Variables	Range of Scores		M (std. dev.)
Attitudes	1.00	22.00	5.61(2.62)
Subjective norms	1.00	15.00	3.42(2.48)
Perceived Behavioral Control	1.00	13.00	4.30(2.11)
Intention to helmet use within 30 days	1.00	5.00	1.58(0.88)

Hierarchical multiple regression analysis: Attitudes, subjective norms, and perceived behavioral control were entered into the first hierarchical multiple regression model. Interesting, only subjective norms explained 22% of variance in their intention to use helmet during motorcycle riding within the next 30 days(See Table 2).

Table 2: Predictors of helmet use intention within the next 30 days (n=677)

Predictors	b	SE	β	t	P
Attitude	-1.693	.001	-.009	-.242	.809
Subjective norm	9.554	.001	.480	13.527	.000
Perceived Behavioral Control	-1.037	.001	-.006	-.152	.880
Constant	2.471	.159	-	15.568	.000

R= .48 ; R^2=.23 ; R^2_{adj}=.22 ; $F_{df4,676}$=65.97

The second hierarchical multiple regression model attitude, subjective norm, perceived behavioral control, and intention to use helmet during motorcycle riding within the next 30 days, were entered. It demonstrated the explanatory power of the TPB, in that social norms, perceived behavioral controls, and intention to use helmet explained only 6% of the variance of their helmet use behavior during motorcycle riding over the past 30 days(See Table 3).

Table 3: Predictors of helmet use behavior over the last 30 days (n=677)

Predictors	b	SE	β	t	P
Attitudes	-4.071	.000	-.048	-1.129	.259
Subjective norms	1.491	.000	.160	3.631	.000
Perceived Behavioral Control	-7.114	.000	-.084	-2.017	.044
Intention to use helmet	5.931	.020	.127	2.985	.003
Constant	1.011	.095		10.597	.000

R= .25 ; R^2=.06 ; R^2_{adj}=.06 ; $F_{df4,676}$=10.77

6 DISCUSSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

Results of this study revealed that 83.2% of the subjects had motorcycle riders and passengers experiences. Only 29.1% used helmets during motorcycle riding within the previous month, despite the Royal Thai government introduced a law that required all motorcycle riders and passengers to wear helmets since 1992, which is consistent with results reported in the prior research (Germeni, Lionis, Davou and Petridou, 2009, pp. 19–23; Pickett et al., 2005). Understanding reasons for non-helmet use and non-compliance in motorcycle helmet use among adolescent need to explore.

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Results of the study also demonstrated the explanatory power of TPB, in that social norm, perceived behavioral control, and intention to use helmet explained only 6% of variance of their helmet use behavior over the last 30 days. This may be the result of under reporting of helmet use behavior by the adolescents, since helmet use is not considered an acceptable cultural behavior among young Thais. In addition, the fact that intention to use helmet was limited to the next 30 days may have been too short of a time frame to adequately capture the adolescents' full intent to use helmet.

The regression results failed to show an influence of attitudes toward helmet use on both intention to use helmet and helmet use behavior among Thai adolescents. However, it's very interesting, subjective norms explained 22% of variance in their intention to use helmet during motorcycle riding within the next 30 days. The supportive effect of significant persons on intention to use helmet was demonstrated. Although prior research has revealed youth intention to use helmet is predicted by their attitudes, their perceived behavioral control and, to a lesser degree, subjective norm, the effect of significant persons on predicting helmet use behavior was demonstrated in this study(eg,"most of the people who are important to me think that I should not ride without a helmet". Therefore, the effects of significant persons of adolescents such as parents, peer groups, cousins, siblings, teachers, traffic polices, and themselves needs further exploration in order to develop strategies to increase Thai adolescent helmet use behavior.

Since this study examined only variables within the TPB, other variables (i.e. family relationship, and self esteem) that may affect adolescents' intention to use helmet need to be examined. It also is important to recognize the role of subjective norms is supporting helmet use among adolescents. Thus, investigations regarding family interventions that focus on assisting families to foster subjective norms to increase intention to use helmet during motorcycle riding and develop perceived behavioral control are indicated.

Given that familial helmet use should be support or promote to prevent motorcycle accident, parents should be encouraged to become actively involved in monitoring their children's' activities especially helmet use during motorcycle riding. In addition, school-based intervention programs that support peer and teachers involvement in the formation of realistic subjective norms and attitudes need to be encouraged for adolescent helmet use behavior.

7   CONCLUSION
The results shown the important of social influence adolescents' intention to use helmet which has been assessed by social norm / subjective norms of the TPB. Adolescents' elaborative thoughts on subjective norms are perceptions on whether they are expected by their friends/ peer groups, family / cousins and the society to perform the recommended behavior. Thus, strategies to increase Thai adolescent helmet use behavior/ helmet promotion should related to foster subjective norms and develop perceived behavioral control.

8   LIMITATIONS
Like all studies, this research has limitations. The adolescent subjects came from ten select schools in Thailand, thus generalizability of the findings across Thailand is somewhat limited. In addition, since only Thai students were studied, applicability of the findings to other cultural settings is limited. In addition, the results may have been influenced by limitations of the cross-sectional design.

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NEW PUBLIC MANAGAMENT IN EDUCATIONAL SYSTEM OF THE REPUBLIC OF SERBIA

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ABSTRACT
The educational system is one of the most important systems in any society. In a long term, well-organized educational system provides highly educated population. The educational structure of the population is a foundation for further growth and development of economy and through system of lifelong learning and permanent training of employees ensures achievement of planned growth goals. For these reasons, the state is vitally interested to create initial conditions for high quality education of the population through allocation of significant amount of budgetary resources. The degree of spending for education of gross domestic product is the indicator of state's interest for implementation of qualitative educational policy. In this regard, the use of the budgetary resources in democratic states is characterized with high level of transparency and simplicity of financial reporting in order to satisfy different needs of information users. The managament of educational institutions through last twenty years there has been recognized a tendency for introduction of elements of desicion making specific for private sector. The introducton of the principles of market thinking in the educational sector requires significant changes in all aspects of educational activities. For these reasons, in changed conditions of functioning of society and state, the educational institutions as budgetary users are faced with rising needs for reforming of accounting and managament. New public managament is reformed concept of budgetary institutions managament, linking budgetary accounting and information support for desicion making process. In this paper, the authors stress the characteristics of New public managament strategy, the role of educational institutions managament in implementation of New public managament strategy and basic features, areas and development of budgetary accounting in educational institutions as significant part of implementation of New public managament, with special regard on the situation in Republic of Serbia.

Keywords: *Budgetary accounting, Decision making, Educational institutions, Financial reporting, Managament, New public management*

1 INTRODUCTION
The degree of public sector development significantly affects the quality of services that public sector provides to citizens, private sector and other interested users of these services. The public sector organized on market principles is designed according to the needs od services users (consumers). All public sector activities, during last two decades, are imposed to strong waves of reform. In these conditions, educational activity has special treatment because of its long-term consequences in development of society and state. The educational structure of population is fundamental for further growth and development of economy and through lifelong learning system provides permanent employees training and achievement of planned growth goals. The costs of educational activities financing and their part in gross

domestic product are among the most important issues for the funcioning of society and state. The system of financing is affected by correct overview of transferred and spent budgetary money of various governmental levels. The accounting provides, through collection, recording and processing of datas, insight in all business transactions of companies and educational institutions.

The evolution of various areas of accounting is the result of specific activities of va-rious sectors of economy. For budgetary users, there is budgetary accounting as a specific form of accounting. In educational institutions, budgetary accounting is an instrument for overviewing the scope of using budgetary resources for financing of educational activities. It is necessary to consider not only the basic principles of budgetary accounting, but also the fundamental directions of public administration reform, in order to improve its quality related to invested budgetary money. In this regard, it is emphasized the impor-tance of New public management for budgatery organizations.

New public management is concept of budgetary institutions management, that links budgetary accounting and information support to decision making process. The educational institutions as budgetary users are characterized with certain specific features related to management, financing and results presentation to their superior institutions. The ma-nagement of educational institutions requires multidisciplinary approach and knowledge of different aspects of educational activities: educational process, normative and regulatory processes, financial and accounting processes, psychological and pedagogical processes, human resources management and managerial approach to all aspects of educational activities. All this causes the specific way of implementation of New public management in educational institutions.

In this paper, the authors present the characteristics of New public management strategy in public sector reforming, the role of management in implementation of principles of New public management in educational institutions, the experiences of implementation of New public management strategy in public sector reforms in the Republic of Serbia and current tendencies in budgetary accounting of educational institutions.

2   THE CHARACTERISTICS OF NEW PUBLIC MANAGAMENT STRATEGY IN PUBLIC SECTOR REFORM

In the field of public administration during last twenty years are defined directions which have improved the quality of comprihensive monitoring of business activities and financial reporting of public sector institutions that are budgetary users. The area of New public management is emphasized as a special form of reforming approach to budgetary institutions management. This concept of public administration management is common name for series of public sector reforms, which are performing in the majority of OECD countries, developing as well as transition countries.

"The main goal of this type of administrative reforms is strategic, tactical and operational formulation of planning, organizing, directing, controlling and coordinating the activities of public administration and public sector in general" (Sevic, 2002, p. 81). The introduction of New public management has a goal to reduce public spending, and its share in gross domestic product. It is based on "cost-benefit analysis, rising role of public managers and reducing hierarchy in public administration" (Sevic, 2002, p. 81). Essentially, reform reduces the number of civil servants (from 28.6% to 20%), and leads to privatization of some parts of

public sector (Separovic-Perko, 2002, p. 41). "According to OECD, the basic characteristics of New public managament are: greater attention on results and rising value of money, reduction of authority and increasing of flexibility, responibility and control, client and service orientation, higher capacity for strategies and policies of development and introduction of competition and other market elements" (Introduction to IPSAS in the public sector in Serbia, 2011, p. 43).

The public management is, since origins, present in the United States with strong stress on efficiency and effectivness, and ex of state administration and public sector-i.e.expressed through results and effects. The concept of New public management is also present in public administration in Australia, New Zealand, the United States and the United Kingdom. As a pioneer in introducing of New public management was Australia, in fact its province New South Wales, allowing all interested researchers insight into advantages and disadvantages of New public management. In case study "The Accrual Basis of Accounting in Public Sector: A Case Study of New South Wales" by Mark Christensen (2003, p. 1) has been pointed out on significant connection between the accrual basis of budgetary accounting and implementation of the principles of New public management. In fact, the reform processes are closely associated with introduction of accrual basis of budgetary accounting. These processes also requires the existence of dominant role of accrual basis of budgetary accounting in implementation of the principles of New public management. On the other hand, especialy fast implementation of reform goals has acheved the Great Britain, during the reign of Margaret Thatcher. Thanks to successful reform of public administration, British model has been promoted as standard model, approved by the IMF and the World Bank.

According to British model, New public management has following features: decentralization of functions through formation of Agency with highly qualified professional managers, increase of public sector flexibility, results measurement, control of activities, responsibility, introduction of human resources management, IT optimization, and development of competence and selection, quality introduction in regulative processes, introduction of principles of responsibility.

In this sense, New public management allows monitoring of public servants activities. The budgetary users are, through applying the principles of New public management, in a position of permanent assessment of efficiency, effectiveness and economic allocation of budgetary money.

The public sector reforms can be seen through four models: market model, participatory model, flexible model, and deregulatory model (Trbovic, Djukanovic and Knezevic, 2010, p. 61). The market model is based on application of the principles of privatization of some parts of public sector and elements of decentralization of public sector management. The participatory model involves changes in budgetary users organization and service quality managament. The flexible model is based on team formation and financing of particular segments of budgetary users activities through projects. The deregulatory model of public sector reform refers is based on reducing of regulation impact and greater freedom of action of public managers and rising initiative in budgetary users activities.

The budgetary accounting is one of fundamental elements in application of New public management and important in reform of public sector. Therefore, it is necessary to be familiar with basic postulates of budgetary accounting and its role in informing of public managers on

operations of budgetary users. Cash basis of budgetary accounting is traditionally accepted among OECD members to cover business operations of public sector for preparation of budget, while accrual basis is used for preparation of financial statements. "The dual approach to the most important instruments of public sector management inherently contains significant risk, because different approach to budgeting and reporting causes difficulties in accounting techniques operations overviewing" (Blondal, 2003, p. 1). The accrual method or accrual based accounting has rising importance in budgetary accounting. It is widely accepted that market thinking lays the foundation of qualitative allocation of budgetary money in developed states and economies and such idea has caused need for accrual basis implementation in accounting records. The states that have adopted accrual based accounting, generaly speaking, previously have implemented public sector reform, especially in government. These reforms were intended to increase managerial responsibility for outputs and environment and reduce the control over input values.

The process of transition to accrual basis of a long-term project. It is necessary, acording to numerous international experiences, eight to ten years to achieve completee implementation of these reforms. The prerequisite for proper implementation of the strategies of New public managament is transformation of budgetary accounting from cash to accrual basis. The association of accounting and managament is obvious in modern economy and budgetary institutions. Therefore, the accrual basis as a tool that provides results based on market priciples, has enough quality for managament of budgetary resources. It has been particularly stressed the necessity to implement the managerial accounting concept in educational institutions and overviewing the relations between managerila accounting and principles of New public managament. Association of accounting and management functions is evident in the modern business environment, both in the economy and the budget organizations.The accrual accounting basis, which provides a basis to establish the results of operations in accordance with market principles, stated as the quality, management of budget funds. Particularly stressed the need for immediate implementation of management accounting concepts in educational institutions, and understanding the links between management accounting and the principles of New Public Management.

In this sense, it is necessary to consider the role of management and especially its role in educational institutions, as well as the possibilities of implementation of New public managament strategy in educational institutions of the Republic of Serbia.

3 THE ROLE OF EDUCATIONAL INSTITUTIONS MANAGAMENT IN IMPLEMENTATION OF NEW PUBLIC MANAGEMENTS STRATEGY

The public managers have originally appeared in United Kingdom in early eighties of the twentieth century as leaders of public management reform. In order to achieve goals of New public managament, public managers have became the executives in education or health service. It has been pointed out the education of managers, widening of all kinds of knowledges they possessed and applied in everyday work. "The public managers in their activities usually use special type of analysis, so called goals management (managament by objectives), cost-benefit analysis, total quality management (TQM), marketing testing and reengineering of administrative organizations " (Trbovic, Djukanovic and Knezevic, 2010, p. 62).

The reporting as an instrument of business performances evaluation is significant for parts as well as for general budgetary organization in educational system. The process of conducting

business and financial activities, or systematic managerial control, is a set of managerial activities focused on effective and efficient use of available budgetary resources in order to achieve objectives of the budgetary users in education. The systematic managerial control is consisted of folowing managerial activities: planning, organization, executive control, communication and motivation. The managerial control is based on decentralization of managament, which means that, through delegation of authority, decision-making is transferred from the top levels of educational system to the lower organization levels or lower levels of managerial structure. According to legislation in the Republic of Serbia (Official Gazette No.72/2009, 52/2011) medium educational management, such as school committees, or bords in higher schools, has considerable authority. These authorities are related to monitoring the legality of educational institutions activities and legal decisions implementation in all aspects of work (educational, financial, normative) of educational institution. In the case of introducing of New public management, medium managers impact will be strengthen, through diversification of decision-making, made on top governments level. This means that lower management has possibility to create and apply any decision with its jurisdiction. Such managerial approach requires creation of adequate performances measurement system, which allows coordinated choices, planning and control types and amounts of systems feutures. Therefore, special role of public managers – educational institutions executives – emerges during implementation of managerial control.

Although public schools and universities are primary users of budgetary resources, it is necessary, through appropriate legislation, to enforce their market orientation. It will allow losing of monopol position, strengthening of competitiveness, increasing of quality, and directing of budgetary resources to those educational segments that are of the greatest interest for state. Following their specific activities an organizational features, for users of budgetary money are applicable two models of organization: functional model and divisional model. Functional model is based on division of complete working process to managament and administration, supply service, teaching process, technical service and professional assistance service. Divisional model requires complete educational service and certain degree of self-managament. New public managament allows educational institutions to create revenue, expenditure, income and profit centers. Market-oriented approach to educational institutions managament focusses on internal sheets of incomes and expenditures, trying to determine internal result of business activities. That result has impact on alternative decision-making of different business segments in educational institutions.

The role of public managers in functional as well as in divisional organization must be on a higher level than is now. Namely, it is necessary to provide flexibility in public managers decision-making of public managers, and to implement principles of New public management, especially those related to managerial skills and professional training. In the case of limited budgetary resources it is important to know how to create other non-budgetary incomes, which requires managerial knowledge, human resources management, accounting, managerial accounting, legal, professional and internal regulative of budgetary organizations. In literature are describe many examples of advantages and disadvantages of implementation of New public managements principless.

4 THE EXPIRIENCES IN APPLYING OF NEW PUBLIC MANAGAMENT'S PRINCIPLESS IN REFORM OF THE CIVIL SERVICE

The application of New public management principless is particularly evident in the countries of Anglo-Saxon tradition, and as leaders in implementation of these principless in public

reform are emphasized British Prime Minister Margaret Thatcher and U.S. President Ronald Reagan. Australia and New Zealand have started to implement New public management on local level and during its application have improved some segments of governement. The modernization of public sector in Great Britain has been carried out through independent agencies, which were market-oriented on the principless of competitivness and without states supervision and control. The broadest reforms were in relations between local and central government and in managament of health and educational institutions. The principless adopted in public sector reform in Great Britain have been distinguished as to be recommended to other to other countries. The reforms in the United States have strenghtened enterpreuniral spirit in public sector, through its professionalization and reorganization. New public management has achivied greatest success in those countries with highly developed institutions, strong sense of market evaluation of all spheres of social and governmental activities and with unsignificant opposition to reforming process.

The problems in application of New public managements principless appear when positive experiences of developed countries are faced with situation in less developed countries. Therefore, it is interesting to examine the expirences of authors with direct involvement in the process of implementation of New public management principless. In a study of Christopher Polit, Professor of Public Management at Erasmus University in Rotterdam, Netherlands, entitled: "The Reforms of Public Management: Relevant Knowledges and International Experiences" (Pollitt, 2003, p. 123) is clearly said: "experiences should excange and not blindely accept foreign reform models as sacrosanct and unmistakebly." In other words, it is necessary to follow self-defined way in reforming public sector. Each state has its own peculiarities and characteristics, either national mentality, tradition or ideas of reforming necessity, so it's illusion to expect that translation from English of some definitions and terms will allow wide acceptance in public sector and among population. Therefore, according to Professor Pollitt (Pollitt, 2003, p. 123), following preconditions are necessary to accept reform model already experienced in other countres: "technology of reform must be relatively simple and understandable, applied methodology must be simple and well understandable, short-term knowledge transfer, voluntary based implementation of reforms, simple relations between main acters in reforming process, significance of common understanding of defined terms and definitions in public sector reform."

The managerial technologies that provide security in the reforming process of public sector are: accrual based accounting, business processing, total quality management, formation of independent organizations and impact of analysis on decision-making. Essentially, reforming necessity must be founded on national consensus that higher level of public sector's services make everyday life easier, rather than be a result influenced by pressure of any national or international organization.

The reforming process in the Republic of Serbia has been implemented for several years, with various success. Conference Report on Public Administration Reform (Conference Report on Public Adminstration, 2009, p. 45) are stressed some objectives of this reform: decentralization, control mechanism strengthening, horizontal coordination of public politics, professionalization and depolitization, modernization and development of e-government, rationalization of emoloyees number and expenditures of public administration. Therefore, the goals are defined and conditions are prepared for implementation of reforms, and according to Report it is necessary to provide additional funds for further financing of the reform.

The main features of reforming process in educational system of Serbia are: transparency, informativeness, advisability, competence and qualification recognition, increasing quality through acquisition of modern equipment and standardization of space in which the educational process in conducted. The steps in financial reform of educational system, according to Ministry of Education of the Republic of Serbia are following: "Field investigation and control of wages, identification and preparation of employees lists, education institutions accreditation and teachers licencing, rationalization of primary and secondary education institutions, strengthening of local government in process of decentralization of educational system, encouraging social dialogue between Ministry of Education and representative workers unions, establishing coordination with other Ministries in the government, establishing cooperation with international institutions" (Journal Economics of Transformation, 2005, p. 6).

Regarding the above, the first steps are taken, such as accreditation of higher educational institutions or transfer of payrolls from schools into Ministry of Finance - Treasury. In other aspects of reform in education, there are visible positive results with defined deadlines for final implementation. Respecting specific local features and intetion to harmonize and enforce E.U. legislation, the Ministry of Education has prepared The Educational Strategy until 2020. The process of managerial reforming in educational system is unstoppable. Sufficient financial resources are fundamental precondition for complete implementation of these reforms, which in one basic governmental tasks in the future. The need for greater part of gross domestic product dedicated to education is imperative and through interconection between New public management and expected educational expenditures can be seen the importance of its implementation in educational institutions in the Republic of Serbia.

5   CONCLUSION

The modern state and society are faced with limited budgetary resources, caused by contemporary economic and financial crisis, and that situation implies the necessity of reforming of public administration. The emergence of public managers and public management has increased the level of budgetary resources managament, leading to further implementation of the principles of public management and theoretical explication of New public management principless, more or less applicable in praxis. All budgetary users are faced with significantly reduced amount of financial resources. This is the main reason for introducing competition in the public services market and increasing preseance of private sector in activities previosly financed exclusively by budgetary resources (education, health service, social welfare, etc.).

New public management is set of comprehensive reforming steps, that touch all segments of society. Its source are developed states with profoundly developed institutions, such as Great Britain, the United States, Australia, New Zealand, the Netherlands. Because of rising budgetary expenses, these countries have seen necessity to relieve budget through partial privatization of public enterprises. The experiences in implementation of New public management are various, but it is obvious that privatized public enterprises are not suffcently effecient and profitable. In existing studies are dominant positive characteristics of reforming and implementation of New public management, among them is increasing quality of given services. Equally significant was introduction of the principles of managerial accounting as fundamental basis for qualitative financial reporting in public sector.

It is widely accepted that education has profound importance in any society. The most important achievements of implementation of New public management are: professionalization of management, training of managers, multidisciplinary approach to management in educational institutions. The implementation of New public management principless in the Republic of Serbia will be completed in the future. As preconditions for its completion are introduction of accrual based accounting in public sector and applying of managerial accounting principless. It is also important to further professional knowledges of public managers – executeves in educational institution. Because of limited budgetary resources for financing education in Serbia, application of economic principless such as effectivness or efficiency and responsibility for results will improve the quality of work in educational system. The final goal of reforming process, through implementation of New public management principless and strategies, is clarified system of result evaluation. Therefore, it is necessary to separate responsibility of different levels of management in educational institutions, from Ministry of Education, through school boards, to school executives.

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Challenges of the Modern World - Contemporary Economy and Globalization

MALAWI, ZAMBIA, AND THE UNITED STATES: CREATING SYNERGY AND PUBLIC HEALTH CAPACITY BUIDLING TO ADDRESS HEALTH AND SOCIAL PROBLEMS

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ABSTRACT
Malawi and Zambia share not only a common border but also many of the same health problems. Both countries have adopted the Millennium Development Goals (MDGs) of the United Nations as targets for development including reducing the maternal mortality ratio; reducing the mortality rate among children under the age of five years; improving hygiene and access to safe water, and improving nutrition. In 2010–2012, the Department of Population Health Science and the School of Education at Virginia Tech, through a Department of State (Bureau of Educational and Cultural Affairs) grant partnered with NGOs in Malawi and Zambia and sponsored twenty eight (n=28) health professionals (Global Health Fellows) from both countries to participate in a four week exchange program. The Fellows spent three weeks at Virginia Tech and one week in Washington, DC. The purpose of this project was twofold: first, to engage professionals at the grassroots level who are actively involved in health care for marginalized populations in Malawi and Zambia, and second, to

develop synergy among community health and media professionals from Malawi, Zambia, and the United States that focused on health strategies to educate women and children in reproductive health, nutrition, hygiene, and sanitation. While in the United States participants learned American public health best practices used to address similar health problems. In addition they spent one week working with a public health professional in an immersion experience. This culminated in 28 different action plans that were implemented when they returned to their country. Action plans included addressing issues associated with women's health, community capacity, reducing the spread of HIV, and health literacy. An American team of public health professionals visited each participant 4 months after implementation of their action plan. Partnering with in country NGOs to select Global Health Fellows, learning American public health best practices, immersion experiences, action plans and follow-up were all successfully planned and implemented. This project represents a successful international partnership that led to important sustainable projects with the potential to impact public health capacity.

Keywords: *Best Practices, Global Health Fellows, International Partnerships, Millennium Development Goals, Public Health Capacity Building*

1   INTRODUCTION

Malawi and Zambia have many things in common. They have a common border, and they once were one country under the Federation of Rhodesia and Nyasaland from 1953 to 1963. The people near their borders share cultural norms and language. During the colonial period under the British rule, the development strategies were very similar, with the exception of the development of industry: in Zambia, the colonial power emphasized mining while in Malawi farming was the mainstay. Both countries have similar challenges regarding development. The majority of their people live in rural areas. Both countries face high levels of poverty with more than sixty percent of the population living on less than $2 per day (World Vision, 2010). In Zambia, one in five children is underweight and 46% of the population is undernourished. In Malawi, 53% of the people live below the poverty threshold, and 75% of secondary school aged children are either working or staying at home to care for their siblings instead of going to school. A chronic food crisis is a major cause of malnutrition and has increased the risk of diseases.

Both countries have adopted the Millennium Development Goals (MDGs) of the United Nations and targets for development. These goals are an embodiment of wider human concerns and issues which are intended to provide "people centered" measures of human progress. These goals are also intended to encourage and challenge national initiatives and strategies geared towards alleviating poverty and improving living standards of the "poorest of the poor" across many nations. At the United Nations forum in New York, heads of state and governments decided to focus on eight goals that touch upon the following: available income and food; education; gender equality; child mortality; maternal health; HIV/AIDS and major diseases; environmental sustainability; and global partnership (UNDP/Malawi, 2009). Both countries are committed to achieving the MDGs but have been constrained by insufficient resources and limited public health capacity. However, with regard to the MDGs relating to health, both Malawi and Zambia have been working on the following priorities:
  a)   Reducing the maternal mortality ratio;
  b)   Reducing the mortality rate among children under the age of five years;
  c)   Improving hygiene and access to safe water; and
  d)   Improving nutrition.

Many communities, particularly in rural areas, do not have easy access to public health information because of the severe shortage of professional staff in the health sectors of both countries as summarized in table 1.

Table 1: Statistics of physicians and nurses (World Health Organization, 2010)

Country	Number of physicians per 10,000 people	Number of nurses per 10,000 people
United Kingdom	23	128
United States	26	94
Malawi	<1	6
Zambia	1	7

According to World Health Organization, the recommended minimum number of health care professionals (physicians, nurses and mid-wives) required to provide key health care services that can meet the MDGs is 23 per population of 10,000. With an average density of seven professionals to 10,000 people, Malawi and Zambia are, therefore, far below the optimum number of health professionals. This human resource constraint has a serious impact on the two countries' capacities to implement effective and efficient strategies for reducing child mortality and improving maternal health in line with the MDGs, through for example, educating women in reproductive health, nutrition, hygiene and sanitation.

Faced with the overwhelming workloads and other constraints such as poor communication and transport infrastructure, limited health kits and inadequate supplies of electricity and safe water the health and social problems in Malawi and Zambia are exacerbated.

The purpose of this project was twofold: first, to engage professionals at the grassroots level who are actively involved in health care for marginalized populations in Malawi and Zambia, and second to develop synergy among community health and media professionals from Malawi , Zambia, and the United States that focused on health strategies to educate women and children in reproductive health, nutrition, hygiene, and sanitation

In February, 2010, funding was received from the United States Department of State (Bureau of Educational and Cultural Affairs) to develop an educational experience for professionals who are actively involved in health care for marginalized populations at the grassroots level such as public health officials, midwives, community leaders, activists, educators, NGO workers, and media specialists to:
1. Evaluate community health policies, practices, and processes focused on reproductive health, nutrition, hygiene and sanitation and identify those practices, policies, and process appropriate for their respective communities;
2. Develop sound, comprehensive community health strategies focused on improving health and wellness of women and children in disadvantaged urban and rural communities;
3. Gain an understanding of community health strategies, policies, practices, and processes that address the health and wellness of women and children in disadvantaged urban and rural communities in Zambia and Malawi.

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The impact of this project was the creation of international networking among professionals participating in the cultural exchange visited. Professionals from Malawi, Zambia, and the US, through this project, developed sustainable networks that facilitated exchange of challenges and best practices in the provision of public health services to the underserved communities.

Accomplishing the objectives of this project required partnering with in country NGOs, recruiting health and media professions in Malawi and Zambia, developing a four week educational experience based in the United States, and evaluating the project. Figure 1 highlights the relationship of the major activities involved in this program.

2   METHODS

2.1   Global Partnerships
The Department of Population Health Sciences and the School of Education at Virginia Tech partnered with the Malawi Health Equity Network in Lilongwe, Malawi and World Vision in Lusaka, Zambia. These NGOs assisted both in the recruitment of health and media professionals from Zambia and Malawi and coordinated experiences for the US teams follow up visits to projects in Zambia and Malawi.

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Virginia Tech (United States Department of State Funding)

Department of Population Health Sciences	School of Education

Partnerships in Zambia and Malawi

World Vision Zambia	Malawi Health Equity Network

Recruitment of Global Health Fellows: World Vision Zambia, Malawi Health Equity Network, Virginia Tech

14 Selected from Zambia	14 Selected from Malawi

Development of Educational Program

Virginia Tech	Virginia Community Health Agencies

Year 1: In May, 2012 14 Global Health Fellows Visit Virginia Tech and Washington, DC

7 from Zambia	7 from Malawi

Global Health Fellows Participate in Educational Program

2 Week Educational Program	1 Week Immersion Experience	1 Week Washington, DC

Global Health Fellows Return Home

Implement Action Plans in Zambia	Implement Action Plans in Malawi

U.S Team Visits Project Sites

One Team Visits Projects in Malawi	One Team Visits Projects in Zambia

Virginia Tech: Develop Plans for Year 2

14 Global Health Fellows who did not attend the first year prepare to attend Year 2

Figure 1: Activites Involved in the Global Exchange

2.2   Recruiting Zambian and Malawian Health Professionals

Through a competitive process, 28 Zambians and Malawians from the health, education, and journalism sectors were selected for US exchanges (seven from each country in year one and year two). They were referred to as Global Health Fellows. The Malawi Health Equity Network and World Vision Zambia were instrumental in identifying in country applicants for

the program and conducting several rounds of interviews to yield a smaller group of candidates. Given that at least a portion of the projects centered on using radio and print media to disseminate information, the messages had the potential to reach millions of people. Participants provided a project report and project sites were evaluated by both the project directors and site visit teams.

2.3   Program Logistics

A program such as this one has many moving parts. The US Exchange involved seminars, discussions, on-site visits, internships, home stays, and cultural experiences. Each participant developed a project designed to increase the health literacy of women and children in urban and rural settings in Zambia and Malawi. After the interviewing and recruitment of health professionals, project directors worked with the United States Embassies in Malawi and Zambia to get immigration approval for participants. For the most part this went smoothly with much Embassy cooperation. Round trip airline flights and hotel accommodations were confirmed. American families who would host the participant for the third week were identified and recruited. The intention was to provide an opportunity for the participant to live with an American family and see how the family functions on a day-to-day basis.

Project directors also needed to critically reviewed the participants' background and interests so that a matching education program and immersion experience could be developed. Developing the educational and immersion experience was done in cooperation with faculty from Virginia Tech and community based health professionals. Draft copies of the program were shared with participants two months before their arrival to procure feedback to update and match their needs and interests with program content.

2.4   Educational Experience

Weeks 1 and 2: Seminars at Virginia Tech

Topics

- Environmental Health
- Epidemiology
- Health Education/Promotion
- Health Communication
- Health Care Systems
- Public Health Programming
- Public Health Program Evaluation
- Grant Writing
- Program Sustainability

Week 3 – Immersion Experience

40 Hour Placement (immersion experience) in

- New River Valley Health District
- Free Clinic of the New River Valley
- Child Health Investment Partnership

- Community Services Boards
- Roanoke County Prevention Council
- Television and Radio Stations

Week 4 – Washington, D.C.

- United States Department of State Conference
- Networking with Respective Embassies

Action Plans

Each participant developed an action plan for a health problem they wanted to address, mostly work related. Action plans were developed in consultation with content specialists from Weeks 1 and 2, the immersion experience preceptor, and faculty from the Department of Population Health Sciences. The format of the action plan consisted of a documentation of the health problem/issue, measurable objectives, intervention, resources needed to implement the intervention, evaluation plan and sustainability plan. Each participant developed a budget to implement their action plan and after the budget review they received $300 to implement the plan after budget review.

Examples of action plans can be seen in Table 2

Table 2: Examples of Action Plans

Action Plan Title	Country	Brief Description	Estimated Impact
Income Generating Activities by HIV Positive Mothers to Improve Nutrition	Zambia	Ten village groups of women and orphans planted gardens where none had existed before to provide for better nutrition and market for money	300 (10 women per village group and 30 orphans per group)
Health Literacy Programs in 40 Churches	Zambia	Volunteers trained in 40 churches who then serve as group facilitators to communicate messages on reproductive health	1,280 (80 volunteers trained; 3 workshops per church and average attendance of 20)
Community-Based Food Supplement Sustainability Program	Malawi	Building a goat house and purchasing goats to provide nourishment for children under 5.	100 children under 5 are receiving daily milk
Contraceptive Clinic	Malawi	Health communication messages focused on contraception	3,000 women
Promoting Behavior Change for Better Nutrition Using Radio	Malawi	Radio messages focused on health behaviors	10,000 Malawians

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Primary School Sanitation Project	Zambia	Training and sensitization on hygiene through skits and discussion including hand washing techniques	1,000 youth
Youth Sensitization on Malaria through Soccer Tournaments	Zambia	Young men are using malaria nets to fish with. To garner their support and understanding of the problem, soccer tournaments were organized which drew them to hear the messages and participate	100 young men and 10,000 spectators
Community Health Scorecard	Malawi	Comprehensive set of needs assessment activities to determine factors related to health status, community engagement, resources and responsiveness. Strategies are then developed to address the findings	500 villagers
Community Bicycle Ambulance	Malawi	Provides transport to health care (15 km away from village) for pregnant women and critically ill children. Access encourages women to deliver their baby in clinics where they can be HIV tested and treated.	3,000 villagers
Improving OVC Households Resilience Through Economic Strengthening in Lusaka	Zambia	Empowering village women who have been impacted by HIV/AIDS to economically strengthen their community through the building of a goat shelter and selling goat milk	5 village women and 25 children

2.5   Follow up Visits

Four months after the Global Health Fellows returned home two teams of American college faculty and medical professionals, most of whom had been involved in the educational program visited each project in Malawi and Zambia. Over a two week period one team visited Malawi and one team visited Zambia. Each team was prepared to both assist the Global Health Fellow with project related issues and evaluate the implementation and impact.

2.6   Project Evaluation

Each project was evaluated based on the evaluation framework in the individual action plan. In addition, the entire program was evaluated by each participant. In all cases the Global Health Fellows were successful in achieving the objectives in their action plans and the projects were felt to be sustainable.

3 PROGRAM EVALUATION

Participants were provided an opportunity to evaluate the overall program. An open ended survey was created and distributed toward the end of Week 4. Results of the evaluation were overwhelmingly positive. Examples of comments from participants concerning what they thought the US would be and what they found from their experience included:

Everything in America is big – large portions of food, sodas, cars

I thought all white people were not good to black people, but see that's not true

People not being friendly, but I found out that people are very friendly

I was surprised with the way people are concerned with life. Life is very fast as compared to Malawi, especially about time

What surprised me? Non-profit fundraising; more Christians than I thought; Virginia Tech is a big university (thought it would be small); thought people would be too reserved to speak but they are cheerful; thought students would be wild (less concerned for each other) but found they were courteous and humorous.

Unsafe, noisy, violent environment as portrayed in Hollywood movies, but we had a safe, violent free setup and no guards.

American people could not have any interest in visitors from Malawi, but many showed interest and wanted to know more of Malawi.

Thought there were no individuals who struggle to get health services, but I noted that there are people who are earning below federal poverty levels and cannot have insurance

My general perception about Americans was that they were arrogant, forceful, unkind as opposed to what we saw. People are a lot more kind and warm hearted.

4 CONCLUSION

The global exchange is a very meaningful way to promote learning about how to deal with health challenges involving social development. The learning was bi-directional.

Malawian/Zambian professionals learned about United States public health best practices. More specifically, they (1) learned how community health efforts work together to protect, promote, and improve the health of the community; (2) observed medical technologies that improve patient/client health; (3) applied networking and skills transfer opportunities to build problem-based community health teams that will continue in country; and (4) observed colleagues' attitudes towards "clients" and noting the impact of culture on the concept of care.

United States professionals who participated in the classroom/community based educational experience and/or supervised the immersion experience: learned how public health professionals work with limited resources in situations of great demand for health services; how others work in environments characterized by limited or lack of communication infrastructure, inadequate health facilities, and poor supply of water and electricity; encourage

networking and skills transfer opportunities; and observe colleagues' attitudes towards "clients" and noting the impact of culture on the concept of care Exposure to different cultural settings helped US participants appreciate cultural diversity and enhance their openness to different colleagues and clients in today's global village in which they practice their community health based professions.

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CONCEPTUAL RELATIONSHIPS BETWEEN TRADE AND TOURISM

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ABSTRACT

As a very dynamic phenomenon, tourism comprises activities which attract tourists and meet their requirements. Moreover, tourism accelerates other related industries such as trade, the local food production, gastronomy, etc. This paper deals with the relationship between trade and tourism which is nowadays intensified due to an inadequate supply of tourism industry. Today, tourism cannot rely on agriculture and local food production, because there is an inadequate infrastructure to ensure long-term logistics efficiency and to carry out all activities involved in supply of tourism business entities. In such a situation, trade companies provide necessary logistical support for tourism industry. Moreover, wholesalers and retailers start to dictate types of goods, pricing conditions, etc. in tourism industry. In particular, the focus of this paper is on the relationships between Croatian trade and tourism. This relationships was explored from both trade and tourism perspective, and including customers' attitudes as well. Therefore, for the purpose of this paper, a three-phase research study, including a qualitative and a quantitative approach, was used: 1) the qualitative study among trade companies which intended to find out the level of cooperation between trade companies and hotels and restaurants; 2) the qualitative study on the group of hotels and restaurants, with the main goal to assess the quality of trade offerings; 3) quantitative study on the sample of tourists in order to find out the level of tourists' satisfaction with the Croatian hotels' and restaurants' offerings. The findings of the study confirm positive relationships between trade and tourism but study also found some areas for improvement.

Keywords: Croatia, Tourism, Trade

1 INTRODUCTION

Tourism industry has been identified as one of the most important sectors in the economics development. As an evolving sector, it has been defined as the sum of those industrial and commercial activities which produce goods and services, and mainly consumed by foreign visitors or domestic tourists (Hanafiah et al., 2011).

Heterogeneousness is the main characteristic of tourism industry. Many tourism developments are related to investment in other sectors of the economy (Costa and Ferrone, 1995) such as transport, food industry, trade, etc. World Tourism Organization points out its multiplier effect shown through the first round of tourists` expenditures on food, beverages, entertainment, clothing, gift and souvenirs, etc. Development planners point out great opportunity of tourism which, through the creation of backward linkages, can stimulate agriculture and local food production, industry and ancillary services (Torres, 2002). According to Assaker et al. (2011, p. 258), tourism's importance in a country's development has been well documented, and particular attention has been given to the relationship between trade and tourism. Their relationship is evident in many areas, such as: (1) in the increasingly importance of shopping as a travel activity and its significant contribution to the retail trade in tourist markets (Alegre and Cladera, 2012; Hu and Yu, 2007); (2) in the local production of goods and services (Hanafiah et al., 2011); (3) in the opportunities for the employment of local people (Azarya, 2004); (4) in the supply of tourism entities; (5) in providing logistical

support for tourism industry, etc. Trade is an intermediary whose purpose is to distribute products from producers to customers. Last decade we have been witnessing the increase of the range of services offered by trade entities and the extension of trade activities. Processes of concentration and integration transformed trade from a passive intermediary into an active market subject. Small producers often lack contacts and financial resources to carry out direct marketing, and therefore they rely on wholesalers and retailers as intermediaries and their superior efficiency in making goods widely available and accessible to target market (Kotler and Keller, 2006). However, we should bear in mind that trade comprises perform functions that are "visible" to customers and those that are involved in physical distribution and logistics. The fact is that shopping and gastronomy have been recognized as activities tourists often do while travelling (Cai et al., 2001), but they mostly rely on series of activities and companies that move products through on their journey from initial suppliers to tourism entities (hotels, restaurants, souvenirs shops, etc.). Zehner (2009, p. 332) points out tourism as a service-intensive industry that is dependent on the quality of customers' service experiences and their consequent assessments of satisfaction or dissatisfaction. Changing and more demanding tourists' requirements bring challenges among tourism practitioners and trade companies in how to better understand the tourists' shopping behaviour and capture their buying power (Yu and Littrell, 2005).

This paper addresses the relationship between trade and tourism in order to find out in which way they affect each other. In particular, the focus of this paper is on the relationships between Croatian trade and tourism, which was explored from both trade and tourism perspective, and including customers' attitudes as well. In other words, the purpose of the study was to find out whether trade companies provide necessary logistical support for Croatian tourism industry and positively affect tourists' level of satisfaction. As one of the most important industries in the Republic of Croatia (according to the figures from the Central Bureau of Statistics, in 2011 the whole trade share of GDP was 10 per cent, and it accounted for 16 per cent of labour force) trade should have greater importance in tourism offer than it has today. For example, there is no information about the number of stores, types of stores, official working hours, domestic offer in stores, etc., on web sites of tourist community. Croatian Chamber of Economy has been successfully taking the action „buy Croatian" in order to encourage citizens to buy products of Croatian origin, but there are no co-ordinated activities related to tourism industry.

In order to explore the relationships from both trade and tourism perspective, and including customers' attitudes as well, the research was guided by three research questions:
RQ1. What is the level of satisfaction of trade companies, operating on the Croatian market, with the cooperation between them and hotels and restaurants?
RQ2. Do Croatian tourism industry/companies consider high the quality of trade offerings?
RQ3. What is the level of tourists' satisfaction with the Croatian hotels' and restaurants' offerings?

Following this introduction, the paper undertakes a review of the relevant literature regarding trade and tourism. Then it explains a methodology and results of the qualitative study among tourism and trade entities, and the results of the quantitative study on the sample of tourists in three most important tourism areas in Croatia: the county of Primorje-Gorski kotar, the county of Split-Dalmatia and the county of Istria (which together accounted for 67.4 tourist nights in Croatia). The paper then discusses the limitations of the study and future research possibilities. The paper concludes with a summary of the major findings of the study.

2 LITERATURE REVIEW

Although there are many studies that highlighted the importance of tourism and trade, they mostly relate to peculiar components of both sectors. In such a way, trade was explored in the area of retailing, distributive trade, etc., while tourism was explored in the area of special interests of tourism, such as sport tourism, rural tourism, etc. There has been little academic investigation into the area of the relationships of tourism and trade, and positive and/or negative aspects associated with their relationships. Furthermore, poor quality of research has been a continual problem in tourism studies and most of the studies merely focus on tourist flows and receipts.

Blazevic (2007) analyzes tourism as the socio-cultural phenomenon and as the important part of the overall economic system focusing on its relationships with other economic subsystems. Gamage and King (1999) investigate economic effects of tourism spending and find out that the total impact of tourists expenditures are most evident in the wholesale and retail sector.

Comparing the initial and flow-on economic effects of tourism spending by two different types of tourists: migrants resident in Australia and Australians born either in Australia or in a country other than Sri Lanka, Gamage and King (1999) reveal that different expenditure priorities are evident between those groups: non-expatriate tourists were found to spend more on food and beverages with relatively higher flow-on effects, while expatriate expenditures focused on the retail and wholesale sector and on local transport with relatively lower flow-on effects. Babu and Henthorne (2007) investigate the possible impacts of the General Agreement on Trade in Services (GATS) for sustainable development of tourism, especially in the context of the third world.

Timothy and Butler (1995) examine the reasons for the rising number of Canadian tourists spending their holidays in the USA and found out shopping as one of their most enjoyable leisure-time activities. The authors point out that often tourists spend more money on shopping than other forms of entertainment. The same observation was expressed by Eccles and Costa (1996, p. 46) who suggest that the mega-mall concept is being replicated and we may soon witness people visiting a particular area simply for the shopping experience.

Thomas and Thomas (2006) examines how micro businesses within the locality (particularly, traders) responded to the changing attitude of the local authority with regard to tourism. They found out that there was little sense among local traders of how to get involved in shaping how tourism resources would be used, even though the local businesses were central to the delivery of the tourist experience. Renko et al. (2010) point out tourism industry as the possibility for promoting and selling local foodstuffs. Grgona (2002) suggests the necessity of tourism analysis as an activity which represents significant developmental chance for faster economic development of Croatian islands.

The tourism sector is one of the few service sectors showing concrete and quantified trading opportunities for all countries, regardless of level of development (Paton, 2003). Kulendran and Wilson (2000) have explained tourism demand by using variable such as income, tourism price, transportation costs, trade of goods and services. They analysed the direction of causality between different travel and (aggregate) trade categories for Australia and its four main trading partners. Such relationships between international trade and tourism, focusing on the effect that German tourism to Spain has on German imports of Spanish wine, was found

by Fischer and Gil-Alana (2006). Moreover, a positively correlated link between trade and tourism in Malaysia was observed (Hanafiah et al., 2011).

Sutalo et al. (2011) used input-output model and Tourism Satellite Account to assess the total, direct and indirect contribution of tourism demand to the Croatian economy. According to the figures from the Central Bureau of Statistics (www.mint.hr), in 2011 the tourism share of Croatian GDP was 14.4 per cent. Assaker et al. (2011) proposed the model demonstrating the causal relationships between the primary constituents of the tourism destination paradigm – the economy (measured by several variables, and trade volume among them), society, and the natural and infrastructural environments – and demand for tourism at that destination. Meng and Xu (2012) study provide better information and understanding of the factors influencing tourist shopping behaviour, and lead to improved planning, marketing and management of sales, expenditures and opportunities in the tourism and retail industries.

Related to tourism, several studies have shown the advantages of cooperation between entrepreneurs in different industries (Buhalis, 2000; Smeral, 1998). Zehner (2009, p. 342) identifies three forms of cooperation: (1) Horizontal cooperation among companies at the same level of production (for example, among hotels); (2) Vertical cooperation between companies at different production levels (for example, between tour operators and tourist agencies); (3) Diagonal (or lateral) cooperation among companies in different industries (for example, between tourism and agriculture, or between tourism and trade).

3   RESEARCH METHOD

For the purpose of this paper, a research study examining the level of satisfaction of trade companies (operating on the Croatian market) with the cooperation between them and hotels and restaurants, the quality of trade offerings, the level of tourists' satisfaction with the overall services and products offered in the Croatian hotels and restaurants in three phases was conducted. The research comprised three Croatian counties: the county of Primorje-Gorski kotar, the county of Split-Dalmatia and the county of Istria. Using those three Croatian counties for investigation seemed particularly interesting given the fact that according to the number of tourist nights (Statistical Yearbook, 2011) those counties have always been ranked on the first three places (together they accounted for 67.4 tourist nights in Croatia).

Table 1 and Table 2 are given in order to provide the comparison of the situation in tourism and trade in investigated counties. There should be pointed out that the lowest percentage of trade activities of three counties in the total trade in Croatia is the result of the concentration of trade activities in the City of Zagreb (which accounted for 60.4 per cent of total turnover in Croatia). In other words, if we do not consider the county of City of Zagreb in our calculations, investigated counties (the county of Primorje-Gorski kotar, the county of Split-Dalmatia and the county of Istria) will be ranked among the first five counties.

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Table 1: Data on tourism activity in selected counties (2010)
(Statistical Yearbook, 2011, pp. 412, 427)

County	Tourist nights	% of total tourist nights in Croatia	Hotel and restaurant activity (outlets)	% of total hotel and restaurant activity in Croatia
Istria	17.731.881	31,4	1877	10,6
Primorje-Gorski kotar	10.938.291	19,4	2213	12,5
Split-Dalmatia	9.364.032	16,6	2175	12,3

Table 2: Data on distributive trade activity in selected counties
(Statistical Yearbook, 2011, p. 400)

County	Legal entities and tradesmen	% of total legal entities and tradesmen in Croatia	Outlets	% of total outlets in Croatia	Turnover including VAT (000 EUR)	% of total turnover in Croatia
Istria	1.307	4,1	1687	4,2	733.708	2,2
Primorje-Gorski kotar	2.201	6,8	2608	6,4	2.099.527	6,3
Split-Dalmatia	3.203	10,0	4324	10,7	2.238.854	6,7

As mentioned before, the three-phase study included a qualitative and a quantitative approach: 1) the qualitative study among trade companies which intended to find out the level of cooperation between trade companies and hotels and restaurants; 2) the qualitative study on the group of hotels and restaurants, with the main goal to assess the quality of trade offerings; 3) quantitative study on the sample of tourists in order to find out the level of tourists' satisfaction with the Croatian hotels' and restaurants' offerings. A qualitative approach is particularly suited for gaining a better understanding of collective and individual perceptions, and open or semi-structured interviews are suitable means to gain such perceptual data with respect to a given phenomenon of interest (Eisenhardt and Graebner, 2007).

The first phase consisted of in-depth interviews with 11 managers in wholesale and retail companies operating in three investigated counties. The research instrument comprised questions about their targeted markets (customers), the level of satisfaction with the cooperation with their customers, problems that they are usually facing with, areas for improvement, etc. The interview lasted on average about 30 minutes and was transcribed.

The second phase consisted of in-depth interviews with 10 managers from the group of hotels and restaurants in three investigated counties. The group includes mostly small family hotels (seven of interviewed managers were managers from small hotels). The research instrument included questions about their suppliers, the level of satisfaction with the cooperation with their suppliers, the level of satisfaction with the suppliers` offerings, payment conditions, areas for improvement, etc. The interview lasted on average about 30 minutes and was transcribed.

It should be noted that similar to Coltman (2007) pre-survey telephone calls were made at each company to identify whether they would be prepared to participate in the survey or whether they could provide contact details for the most appropriate person in the company. In order to avoid unnecessary vast of time, the research instrument was sent to each company few days before interviewing.

In the third phase, a survey method was used for collecting data from the sample of tourist that were spending their summer holidays in hotels in 12 tourist destinations in three investigated counties. The questionnaire for tourists was prepared in Croatian, English, German and Italian and was distributed to tourists at the reception desk of their hotels. In such a way, 300 completed questionnaires were collected.

The questionnaire consisted of three sections:
Section I of the questionnaire was devoted to seven statements relating to the satisfaction with services, food, prices, etc. in hotels and restaurants in three investigated counties. A five-point Likert format was used to indicate the level of satisfaction of tourists (the scale from 5= completely satisfied to 1= completely unsatisfied).

Section II of the questionnaire consisted of four statements relating their shopping experiences while spending holidays in some of three counties included in this research. Respondents were asked to specify their level of satisfaction with the offered products and services, prices, etc. and they do it using five-point Likert format (the scale from 5= completely satisfied to 1= completely unsatisfied).

Section III of the questionnaire consisted of characteristics of the sample (Table 1): country of origin, gender, age and the level of education.

In accordance with the research methods, the analyses, as well as the results, first refer to the study among trade companies, then to the study among hotels and restaurants, and finally to the study on the sample of tourists. What follows is a short discussion of investigated themes and some interpretations.

4 RESULTS

4.1 The perceptions of trade companies about the relationships with hotels and restaurants as customers

The findings of the interview among trade companies revealed that the majority of investigated trade companies were involved in the supply of small family hotels (small hotels have become more and more popular in Croatia due to their successful market orientation). Four companies focused their business operations to restaurants and large hotels. It is interesting that respondents evaluated their co-operation with restaurants with higher grades than their co-operation with hotels. Moreover, respondents (trade companies) that operate in the county of Primorje-Gorski kotar showed higher level of satisfaction with their relationships with tourist entities than respondents in other counties. In general, trade companies considered orders, demand and pricing conditions as areas for improvement. They pointed out:

"Orders are too small, because hotels and restaurants are relying on direct channels of supply while ordering large quantities of goods".(Trade manager from the group of trading companies).

Trade managers pointed out that very often their customers (hotels and restaurants) use their support in the supply of beverage and small quantities of other non-food products. At the same time, they point out flexibility in supply of such small quantities as the main requirement imposed by restaurants and hotels, which mostly affect the level of their mutual

trust and co-operation. It is interesting that one manager referred to the article published a year ago and the question whether Croatian industries like textile and footwear industry can find interests in tourism industry using trade facilities in order to integrate diversified products designed for the satisfaction of tourists` needs in a better and a higher-quality way.

4.2 The perceptions of hotels and restaurants about the relationships with trade companies as suppliers

The findings of interviews among hotels and restaurants revealed that the majority of investigated hotels and restaurants (eight respondents) ordered directly from producers. It is especially evident in the case of foodstuffs, because nowadays hotels and restaurants are trying to differentiate themselves on the market through the fresh and natural food of a higher biological value.

„*Tourists are looking for something new, and authentic.*" (the owner of a small family hotel in Omiš, small town in the coastal part of Croatia).

World trends are placing an imperative influence on the necessity for a strong and efficient synergy of tourism and food industry in Croatia (Renko et al., 2010). Hotels and restaurants are satisfied with the quality of goods and the quality of the supply of trade companies as their suppliers. However, they considered the range of goods and services offered by trade companies as too narrow with high prices. Moreover, they respect the requirements of their tourists who seek for a natural and fresh food from local producers. Five respondents pointed out that they animated and enhanced tourists to participate in the process of preparing local food. In such a way, they created a valuable „tourist experience".

4.3 The perceptions of tourists about hotels` and restaurants` offerings

The sample mostly consisted of male respondents (59 percent of respondents), with high level of education (47 percent of respondents completed 3 years high school). The analysis of tourists` country of origin showed large diversity in the sample, and three groups of tourists made 1/3 of the sample: tourists from Croatia, from Bosnia and Herzegovina and from Germany. The largest percentage of them (53 percent of respondents) spends 50-100EUR on average for food and beverage, as well as other needs. They usually eat three times a week in their hotels (43 percent of respondents), and the rest of the week the largest percentage of them (35 percent of respondents) often go to local restaurants. Those findings were expected due to the fact that small hotels were mostly included in this study. In such hotels high level of service is offered to tourists and tourists are almost treated as family members. Tourists are satisfied (73 percent of respondents) with the quality and freshness of foodstuffs offered in hotels, and 69 percent of respondents are satisfied with the quality and freshness of foodstuffs offered in local restaurants. More than a half of the sample is satisfied with the retail offer in stores, but the possible explanation lies in the fact that tourists do not come for shopping to Croatia. Croatia has still not been the shopping destination for tourists. In answering the question about their satisfaction with the offer of local retail store, they were thinking about souvenirs and small gifts shopping.

5 LIMITATIONS AND FURTHER RESEARCH

A number of potential limitations of this study need to be acknowledged. Firstly, despite the secondary data analysis which suggested three most important tourist counties, the fact that all counties were not included in the sample might have compromised the representativeness of the sample. Also, limitation of the study lies in relatively small number of trade companies,

hotels and restaurants and tourists included in the study. This was mainly attributable to the limited time and resources available for the study. Therefore, the findings of this research should not be generalized across the entire Croatian tourism and trade industry. The methodology followed and the statistical methods employed in the study were also subject to limitations.

The present paper has certainly acknowledged limitations that need to be taken into account when considering the results of the study and its contributions. More generally, as with any academic work, it is hoped that the present paper will stimulate other researchers to find out what are areas for cooperation between trade and tourism entities role that trade companies securing competitive advantage for Croatian tourism as whole. More extensive research is certainly needed in this important area.

6   CONCLUSIVE REMARKS

Tourism is a growing and dynamic phenomenon that should constantly adapt to changes in tourists´ requirements. Due to its complexness and flexibility, tourism industry should act in the cooperation with some other industries. Economic activities of tourism industry are directly related to the development of industries like hospitality, transport and trade, which serve to meet tourists` requirements and to initiate tourists` consumption. In order to increase tourists` consumption, besides „basic tourist services", some tourist destinations are trying to offer „additional services" (entertainment, recreation, sport, adventures, etc.).

This paper has examined the relationship between trade and tourism and tourists` level of satisfaction as the direct consequence of this relationship. The literature review suggests that there has been little academic investigation into the area of the relationships of tourism and trade. There are studies about the relationship between international tourism and international trade, about shopping and tourism, etc. This paper addresses trade and tourism from a completely different point of view. Namely, the study organized for the purpose of this paper tried to find out the level of satisfaction of trade companies, with the cooperation between them and hotels and restaurants; to discover whether tourism industry consider high the quality of trade offerings, and to investigate the level of tourists' satisfaction with the Croatian hotels' and restaurants' offerings. The findings of the paper point out that both trade and tourism companies are satisfied with their relationships, but that there are still more areas for improvement. Namely, world trends in tourism industry are placing an imperative influence on the „natural", „local", „authentic", etc. Hotels and restaurants order directly from local producers and thus differentiate themselves on the market. Only large hotels and restaurants are mostly relying on the supply of trade companies. We have to point out that hotels and restaurants are part of HoReCa market, and that in Croatia there is still no company, like Italian Marr, which operates only in this sector. Producers directly supply almost 30% of HoReCa market. There is also the group of trading companies like Gastro group (strategic alliance of 36 wholesale entities), Metro (the member of the Metro Group and operates as a wholesale store on the Croatian market), Velpro (the member of the leading vertical marketing system in Croatia and operates as a wholesaler) and Getro (the retail chain stores which entered the Croatian market first as Cash&Carry wholesaler) which supply the rest of 70% of the HoReCa market (Renko et al., 2009).

The most important finding of this study is high level of satisfaction of tourists, which is the result of good relationships between trade and tourism entities. Policy makers should take more proactive actions and extend the area of their cooperation. It is very important to

understand that the tourism-industry development strategy in Croatia has to encompass also those issues that are not directly connected with tourism industry (Meler and Ruzic, 2000, p. 279).

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STRATEGY OF INTENSIFICATION OF FOREIGN ECONOMIC ACTIVITIES OF KAZAKHSTAN UNDER WORLD ECONOMY GLOBALIZATION

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ABSTRACT
We look at the theoretical prerequisites of developing a strategy to intensify foreign economic activities and on its basis we reveal general features of the new paradigm of the process in question including three basic components: integration, innovation and competition and describe the factors forming it. Besides, the role of frontier cooperation as an important direction of foreign economic activities development is shown.

Keywords: *Competition, Foreign economic activities, Foreign trade, Frontier activities, Innovations, Integration, Paradigm, Strategy*

1 ECONOMIC PREREQUISITES AND THEORETICAL FRAMEWORK FOR THE INTENSIFICATION OF FOREIGN ECONOMIC ACTIVITIES

Forming in the Republic of Kazakhstan the open economy creates favourable conditions for its integration into the global economy and boosts the influence of foreign economic activities of the country and its business structures on sustainable GDP growth which proved to be positive even during the crisis years (1.1-1.2% in 2008-2009), and in locomotive regions it exceeded 3%, for example, in Aktyubinsk region it stood at 3.5%. Meanwhile, the mechanism of regulating the foreign economic activities needs improving, first of all communication marketing, information and legal components should be revised bearing in mind that Kazakhstan is to join the World Trade Organization in the nearest future following Russia. It requires developing a strategy to intensify the foreign economic activities of the country under the globalization of the world markets of products and services and adapting the normative legal basis to the WTO requirements. At the same time it is essential for our country to join the WTO on favourable terms taking into consideration its economic potential, advantageous geographical position for the goods transit from the West to the East, its rich natural resources and rather qualified human resources, and preservation of cultural and historical traditions of the people of Kazakhstan.

Scientifically, the strategy should be proved on the basis of certain theoretical concepts developed by economists in different countries, including in particular the concept of Kondratiev waves that says that the end of the long wave sees a qualitative change in the productive forces and the formation of new technological setup. We should note that within the fifth technological setup the configuration of natural resources, labour and capital is changing and intellectual capital is becoming the leading productive force leaving behind material capital. Such technological transformations boosted by the development of information and communication technologies within the fifth technological setup were opportunely used by developed countries in the second half of the XX century, which resulted in the world economy globalization and forming the World centre and the World periphery. At the initial stages of globalization the World centre included the USA, Canada, the EU countries and Japan. However, the economic progress of certain countries of the World periphery, first of all, China, India, South Korea, Brazil and Singapore led to tectonic changes

and the countries of the World centre started losing their leading role in the world economy still remaining strong enough in the WTO to determine the policy of this global organization.

The essence of globalization and its forms were described by the Nobel Prize recipients J.Yu. Stiglits, P. Krugman and their followers who consider this phenomenon from the point of view of the integration of national markets into a global system, increasing competition in the conditions of boosting innovations and not just as other countries' joining the global market according to the opinion of Karl Marx who wrote in one of his letters to F. Engels, "Now the global market really exists. Globalization has come true after California and Japan entered the world market".

During the globalization and the scientific and technological progress acceleration, as D. Gallyamova fairly notes, "developed countries are increasingly specializing in the production of science-intensive goods requiring bigger investment in human capital as well as capital-intensive "mature" products".
 At the same time these countries protect their know-how with the help of the legislation by banning the sale of innovation technologies for three years, and after this term the technologies as a rule become obsolete and are replaced by the new ones. Meanwhile Kazakhstan, Russia, Ukraine and Belarus have rather high scientific potential, which enables them to partly limit the import of foreign technologies and boost investment in the development of their own research and development together with creating and introducing new relevant clauses in national legislation.

Innovation theory by Joseph Schumpeter is equally important for the development of the strategy to activate the foreign economic activities of Kazakhstan as the competitive ability of a country, its regions and business communities in the conditions of globalized markets considerably depends on the degree of innovation spread in the economy, which allows to increase the economic efficiency and to achieve a positive balance of foreign trade of the Republic of Kazakhstan.

The contents and structure of developing the strategy of intensifying the foreign economic activities should be based on the theory of competition worked out by certain western economists including the founder of the theory M. Porter. His theory is based on three important postulates: marketing of goods and services according to the volume and quality offered by potential competitors; relations with the suppliers of raw materials; studying the needs and requirements of consumers. It is known that those countries and business structures become competitive that have competitive advantage on the foreign market as compared with other countries and business structures. So, the theory of competition is connected with the theory of advantage that has a long history from A. Smith to D. Ricardo and A. Marshall who defined various types of advantages: absolute, comparative, natural, acquired, the latter being especially important for countries and businesses with low competitive ability.

In particular, according to A. Smith those goods should be purchased that are produced by another country at a lower price. His theory got the name of "the theory of absolute advantage". Followers of mercantilism stood up for the principle of the import of money and goods exceeding export. David Ricardo developed the theory of comparative advantage that contains Smith's concept as a particular case and proved that when assessing the profitability of foreign trade we should compare not absolute but comparative effect: according to him the aggregate product volume will reach its maximum when every product is produced in a

country having lower imputed costs. Later Ricardo's theory was developed by A. Marshall and other economists.

The implementation of the above mentioned theories in social practice and forming new conditions for the global economy to function gave us the basis to create a new paradigm of intensifying the foreign economic activities of Kazakhstan.

2 NEW PARADIGM OF INTENSIFYING THE FOREIGN ECONOMIC ACTIVITIES OF KAZAKHSTAN AND FACTORS OF ITS DEVELOPMENT

In our opinion, the new paradigm of intensifying the foreign economic activities should be based on three key components such as integration, innovation and competition which are the main factors of the world economy globalization, and also on the maximum use of the internal economic potential of the country and its constant increase on the basis of innovation using the principle of economic diversification with simultaneous improvement of the normative and legal mechanism of the state regulation of foreign economic activities in accordance with the institutional structure of the global market system and the WTO requirements.

Meanwhile the need for the international economic activities to be regulated by the government is now acknowledged by almost all the WTO members as it results in positive or negative deformation of the structure of the national economy, it changes the structure of supply and demand for factors of production; secondly, in the short term it leads to income redistribution among industries: the growth of income for export-oriented industries and the decrease of income for import-substituting industries with further growth of the income when mastering imported innovation technologies and efficient equipment which results in leveling the income in export and import-substituting industries and general growth of the economy by boosting the foreign economic activities of the country and the business community within state-private partnership.

When creating the new paradigm we have to take into consideration the following factors:
- preserving competitive position of the raw materials sector of the economy of our country on "near abroad" and foreign markets and leadership on the global market concerning such resources as tungsten, nickel, etc;
- boosting the export of goods produced in the processing industry sector;
- developing legislative measures to preserve agro industrial complex in the conditions of joining the WTO and of the free access of agricultural products from developed countries, first of all, the EU, the USA and Canada, to the local markets of Kazakhstan;
- decreasing the import of agricultural and domestic consumer goods by substituting them for locally produced goods of the same name taking into consideration their compliance with international quality standards and lower prices for the local population;
- using the advantages of the Customs Union of Russia, Kazakhstan and Belarus with further creating common economic space as well as the advantages of frontier cooperation of countries and border territories of Russia and Kazakhstan first of all;
- improving the mechanisms of attracting direct foreign investment which is not only the source of additional funding for our business but also an important factor of accelerated modernization of key assets in material production industries and in the service sphere by using western science intensive technologies and more efficient new equipment supported by modern management practices including personnel and financial management. In particular, the efficiency of informational projects decreases

and implementation of new methods of work becomes slower without advanced personnel training in new modernized programmes concerning new production and innovation technologies;

−   increasing the share of the innovation component of the export of goods and services made in Kazakhstan. It requires intensifying the state support of companies entering international markets with innovation products and services like most western countries do it. For that the government of Kazakhstan and regional governmental bodies should develop a valid concept of domestic innovation business support as well as industrial, structural and monetary policy for establishing external economic links relying on a common domestic market and taking into consideration the strategy of interregional leveling by using the business structure of locomotive regions to boost the business in economically depressive regions, as how the experience shows budget injections for leveling the regions turn out to be inefficient, and they are often called 'money dug in the sand' on the post-soviet territory.

Besides, new methods to assess sustainable export and import of goods in different industries of the economy of Kazakhstan should be developed and there is a need to work out measures of state support of foreign economic activities concerning the export of competitive products whose reproduction is becoming profitable taking in consideration world market opportunities and Kazakhstan's expected joining the WTO. A wide use of state–private partnership and administrative resource when forming investment appeal of a region first of all for foreign investors will contribute to the intensification of foreign economic activities. At the same time to increase the competitiveness of 14 regions of the Republic of Kazakhstan we need to provide state support of domestic science which implies a wide attraction of international scientists and commercialization of its innovation project like in the USA and China.

In the sphere of export and import we should use to the maximum communication monitoring of the world prices to be able to inform the governmental bodies and the business community of Kazakhstan about the dynamics of their changes, which will define the strategy of foreign economic activities at macro and micro levels as well as target business structures at gaining niches in different sectors of the global market for example by developing their own pricing policy for various product groups. Besides, in the republic we should increase the liberalization of the import of advanced science intensive technologies and efficient equipment to modernize the key assets in different industries of the economy of Kazakhstan by simplifying the preparation of documents for import and leasing and by decreasing the customs burden for domestic producers and joint ventures connected with high technology import and located on the territory of Kazakhstan.

3   REGIONAL ASPECTS OF THE INTENSIFICATION OF FOREIGN ECONOMIC ACTIVITIES

The external economic policy of the Republic of Kazakhstan is the most apparent in the relations with Russia and its frontier territories. When developing the concept of frontier cooperation we should bear in mind that frontier cooperation is one of the forms of regional international activity. The need to get over the borders and to establish economic links has been determining for the development of frontier regions. The experience of frontier cooperation has been used in the last decades not only between countries but also between internal regions. Now frontier cooperation can be seen as a specific variety of regional international activity, first of all, an economic one.

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We can distinguish three components in frontier cooperation. The first is connected with solving purely local problems such as establishing economic, social, environmental and cultural contacts between the population of border regions. First of all it means trade, joint solution of environmental problems, medical, educational and cultural services, etc. All this defines the essence of frontier cooperation.

The second component is determined by the cooperation of frontier territories in the sphere of joint performing the state functions – transport, border guarding, securing the safety of national economic space, accident preventing and eliminating, etc.

The third component is immediately connected with direct and mediatorial foreign economic activities of border territories. Its volume depends on the economic potential, the economic structure and the development of international transport infrastructure in border territories.

External economic links play an important role in the development of border territories. They contribute to overcoming their peripheral provincial role in domestic economic systems.

The key factors defining structural specific features and dynamics of frontier cooperation are the correlation of contact and barrier functions of the frontier, socio-economic and ethnic-cultural characteristics of border territories, powers of local authorities concerning international contacts, the level of frontier infrastructure including check-points.

The contents and the dynamics of frontier cooperation is determined by the general level of cooperation of neighbouring countries and problems of state's security connected with it. Nevertheless, other things being equal, more favourable frontier cooperation normally arises when the most developed territories are the border areas. The level of socio-economic development of border territories considerably impacts the contents of frontier cooperation, the diversity of its directions and spheres. Thereby it turns into one of the factors of mutually beneficial interregional development of frontier territories. For instance, frontier cooperation of Orenburg region of Russia and Aktyubinsk region of Kazakhstan proved its efficiency, for example concerning the foreign trade turnover of these regions as its growth rate has exceeded the rate of the two countries for the last seven years. And after creating the customs union Russia, Kazakhstan and Belarus should expect an increase in frontier cooperation. Holding interregional forums of the two countries traditionally opened by the presidents of Russia and Kazakhstan also contributes to that.

As an appendix to the report we offer certain statistics characterizing the state of foreign trade activity of the Republic of Kazakhstan showing the key indices for regions as territorial entities of the country's economy management as well as export-import operations of the republic with foreign countries for January – December 2010.

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APPENDIX

Table 1: Basic Data foreign Trade of Kazakhstan (regions, Astana, Almaty)

January – December 2010
(thous.. doll. USA)

Name of region	Commodity circulation		Export		Import	
	Total	percentage in total volume of commodity turnover, %	Total	percentage in export total volume of region, %	Total	percentage in import total volume of region , %
Republic of Kazakhstan	80 579 410,9	100,0	56 957 151,2	100,0	23 622 259,7	100,0
Akmolinskaya	733 733,7	0,9	424 592,0	0,7	309 141,8	1,3
Aktyubinskaya	7 034 754,9	8,7	5 796 300,6	10,2	1 238 454,3	5,2
Almatinskaya	1 248 024,5	1,5	184 293,4	0,3	1 063 731,1	4,5
Atyrauskaya	21 615 879,2	26,8	20 643 495,4	36,2	972 383,9	4,1
Eastern-Kazakhstanskaya	2 946 044,5	3,7	2 100 001,3	3,7	846 043,2	3,6
Jambylskaya	517 644,8	0,6	264 674,7	0,5	252 970,1	1,1
Western-Kazakhstanskaya	1 813 661,2	2,3	1 172 113,9	2,1	641 547,2	2,7
Karagandinskaya	5 252 113,9	6,5	4 111 388,5	7,2	1 140 725,4	4,8
Kostanayskaya	2 179 570,3	2,7	1 607 831,3	2,8	571 739,0	2,4
Kyzilordinskaya	4 204 290,3	5,2	3 807 430,7	6,7	396 859,6	1,7
Mangistauskaya	7 322 747,2	9,1	5 186 358,1	9,1	2 136 389,1	9,0
Pavlodarskaya	2 282 430,1	2,8	955 313,8	1,7	1 327 116,3	5,6
Northern-Kazakhstanskaya	393 622,4	0,5	132 020,6	0,2	261 601,8	1,1
Southern-Kazakhstanskaya	2 880 050,7	3,6	1 840 214,9	3,2	1 039 835,7	4,4
Astana	6 440 586,6	8,0	4 265 240,3	7,5	2 175 346,3	9,2
Almaty	13 714 256,6	17,0	4 465 881,7	7,8	9 248 374,9	39,2

Challenges of the Modern World - Contemporary Economy and Globalization

Table 2: Basic Data of Foreign Trade of Kazakhstan

January – December 2010
(thous.. doll. USA)

Name of countries	Export				Import			
	Total	From them			Total	From them		
		non convertible currency	Convertible currency	barter		non convertible currency	convertible currency	barter
Total, include:	56 957 151,2	907 142,2	55 815 678,9	686,5	23 622 259,7	2 451 383,3	19 171 840,4	1 897,9
COUNTRIES CIS	5 653 797,2	890 800,0	4 719 219,9	309,2	7 444 469,6	2 329 293,1	5 084 630,7	142,7
COUNTRIES EURASEC	4 518 675,3	877 313,9	3 619 679,5	309,2	5 938 837,5	2 267 392,0	3 657 138,9	142,7
Belarus	35 263,5	2 079,9	33 136,0	-	224 600,8	52 529,2	172 045,4	-
Kyrgyzstan	422 758,3	45 535,5	366 914,3	-	165 953,0	57 500,1	107 550,6	-
Tajikistan	258 839,4	4 746,9	249 354,2	114,7	16 805,6	1 685,5	14 510,6	22,5
Uzbekistan	1 098 933,6	1 195,2	1 093 372,5	-	473 405,0	7 542,7	462 146,1	-
Russia	2 702 880,5	823 756,4	1 876 902,4	194,5	5 058 073,1	2 148 134,5	2 900 886,2	120,2
COUNTRIES, EXCEPT FOR EURASEC	1 135 122,0	13 486,0	1 099 540,4	-	1 505 632,1	61 901,2	1 427 491,9	-
Azerbaijan	342 032,3	962,2	332 561,7	-	102 659,2	11,6	102 164,8	-
Armenia	7 601,0	267,7	7 272,9	-	3 216,6	345,7	2 860,8	-
Moldova	28 062,4	-	28 013,8	-	29 462,0	211,1	29 250,9	-
Turkmenistan ·	91 319,6	1 152,9	78 673,8	-	9 558,3	83,4	9 273,6	-
Ukraine	666 106,7	11 103,3	653 018,2	-	1 360 735,9	61 249,3	1 283 941,7	-
OTHER COUNTRIES WORLD	51 303 354,0	16 342,3	51 096 459,0	377,3	16 177 790,1	122 090,2	14 087 209,7	1 755,3
EUROPE	32 059 663,1	4 239,4	31 939 374,8	289,7	7 560 739,1	53 609,3	6 134 151,3	173,1
COUNTRIES EU	30 790 898,7	4 239,4	30 677 486,2	289,7	7 263 281,1	52 390,0	5 874 663,0	173,1
Austria	2 528 666,0	-	2 527 592,4	-	222 297,9	1 890,6	198 405,2	-
Belgium	53 118,1	200,0	51 967,6	-	176 060,1	667,9	170 274,4	-
Bulgaria	169 238,4	-	169 191,8	-	84 463,6	465,3	83 925,1	-
U.K.	1 388 436,0	-	1 373 647,5	-	727 112,2	3 279,6	630 975,3	-
Hungary	195 371,4	-	195 096,5	-	128 365,2	573,3	125 771,9	-
Germany	1 749 703,9	310,5	1 745 503,2	289,7	1 844 506,8	18 777,9	1 699 645,1	160,2
Greece	992 580,2	-	992 567,9	-	16 772,1	75,6	16 377,4	-
Denmark	26 271,7	-	26 036,9	-	71 877,6	879,8	69 726,6	-
Ireland	182,0	-	-	-	82 638,3	111,3	77 688,4	-
Spain	921 014,7	-	920 829,0	-	100 412,6	1 083,2	88 294,6	0,3
Italy	9 579 024,1	1 224,5	9 564 297,3	-	1 586 799,2	3 762,1	649 052,4	12,5
Cyprus	7 611,0	-	7 601,4	-	3 059,3	-	3 013,7	-
Latvia	135 090,3	-	135 047,9	-	65 798,8	225,2	64 229,0	-
Lithuania	67 252,8	3,0	67 177,2	-	109 215,9	3 336,8	103 138,2	-

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Luxemburg	273,8	-	-	-	10 762,4	104,2	9 064,1	-
malta ·	147,0	-	-	-	1 090,2	-	1 089,3	-
Netherlands	4 159 826,6	-	4 105 804,8	-	301 433,8	1 587,1	272 902,2	-
Poland	1 215 262,1	-	1 212 278,8	-	378 266,7	3 203,0	364 035,7	-
Portugal	733 494,6	-	733 494,6	-	9 943,8	88,8	9 773,2	-
Romania	1 281 838,9	-	1 281 220,7	-	122 346,6	36,5	121 134,3	-
Slovakia	536 470,2	-	536 465,3	-	53 066,0	882,8	51 581,3	-
Slovenia	12 106,9	-	11 832,2	-	64 366,7	938,6	62 115,7	-
Finland	270 060,4	2 497,8	257 628,2	-	207 360,9	3 164,3	198 344,7	-
France	4 433 029,3	-	4 427 702,3	-	498 728,8	3 477,0	429 395,8	-
Czech Republic	40 242,2	-	40 178,6	-	166 858,7	2 114,0	158 431,1	-
Sweden	241 892,0	-	241 690,0	-	207 849,3	1 267,5	197 389,4	-
Estonia	52 694,2	3,6	52 634,0	-	21 827,6	397,9	18 888,9	-
COUNTRIES, EXCEPT FOR EU	1 268 764,4	-	1 261 888,7	-	297 458,0	1 219,3	259 488,3	-
Israel	1 279 600,9	-	1 279 421,1	-	88 772,0	590,0	85 439,9	-
India	117 098,6	-	116 845,1	-	199 581,1	649,3	186 998,8	-
Iran	1 092 156,4	2 233,2	1 066 651,3	-	26 527,1	71,4	24 776,0	-
China	10 121 619,1	2 182,6	10 116 433,1	-	3 962 501,9	20 141,2	3 881 539,9	1 565,9
South Korea	232 868,1	1 355,1	227 494,1	-	526 297,3	7 602,0	508 058,1	-
Pakistan	16 005,5	7,4	15 957,8	-	16 453,6	41,3	16 325,4	-
Turkey	1 236 788,6	1 077,2	1 230 744,8	23,7	618 689,3	3 938,5	505 140,3	16,3
Japan	539 312,8		539 261,7		560 258,4	14 ,3 644	449 994,0	
Brazil	18 070,7	-	17 981,1	-	233 680,6	53,4	233 388,4	-
Canada	2 448 447,8	149,1	2 447 859,3	-	217 349,7	6 317,6	198 739,3	-
USA	878 669,6	1 493,4	866 915,9	-	1 319 492,8	7 685,8	1 136 727,0	-

MULTINOMIAL LOGISTIC ANALYSIS OF "SUSU" CONTRIBUTION IN GHANA

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ABSTRACT
The study employs cumulative multinomial logistic regression model to analyze "susu" (a micro-saving mechanism for collection of deposits that is common on the West African markets) contribution in Ghana. Evidence from the analysis of 1,630 contributors randomly sampled indicates that between male and female contributors, the former are more likely to contribute higher amounts than the latter. The paper, therefore, avers that "susu" institutions must target their marketing campaigns at income-earning males. Additionally, there is evidence to conclude that the number of years of contribution, the number of years a contributor has been in business, marital status and gender are predictors of 'susu' contribution in Ghana.

Keywords: Cedi, Contribution, Gender, Ghana, Marital Status, Microfinance, "Susu"

JEL Classification: D10, D11, D12 E51, G21

1   INTRODUCTION

Financial exclusion among the poor but productive group of the Ghanaian economy has been a debilitating conundrum taxing the intellectual energy of policy makers in Ghana. The rigmarole lending procedures of commercial banks in Ghana, including collateral caveat, have succeeded in pinning most of the poor but productive group of the population to the parameters of mediocrity, rendering stale their entrepreneurial ideas that could otherwise catalyze the developmental agenda of the country. However, proponents of the microfinance concept vociferously argue that it holds the potential to obliterate the financial exclusion headache of policy makers by making finance accessible to the poor but financially excluded at an affordable and convenient cost. Matin et al. (2002) contend that microfinance can be a strategically vital platform that the poor can use to raise their own prospects for an escape from poverty. Indeed, studies have amply demonstrated that microfinance plays three broad roles in development: It helps the very poor households to meet basic needs and protects them against risks; it improves household economic welfare; and it helps to empower women by supporting women's economic participation and so promotes gender equity (Asiama and Osei, 2007).

Microfinance traces its roots to microcredit which was initially administered to the poor as a way of liberating them from the shackles of financial incarceration. After trying the microcredit concept for some time it became palpable that saving services—and not just loans—might help to improve wellbeing of the poor in general and of women in particular (Vonderlack and Schreiner, 2001). Microfinance institutions consist of organizations and

agents that engage in relatively small financial transactions using specialized, character-based methodologies to serve low-income households, small farmers and others who lack access to the banking system. They may be informal, semi-formal (that is, legally registered but not under the central bank regulation), or formal financial intermediaries (Steel, 1998; referenced by Aryeetey, 2008).

The microfinance sector in Ghana comprises various types of institutions and these have been grouped into four (4) categories, namely: formal suppliers such as savings and loans companies, rural and community banks as well as some development and commercial banks; semi-formal suppliers such as credit unions, financial non-governmental Organizations (FNGOs), and cooperatives; informal suppliers such as susu collectors and clubs, rotating and accumulating savings and credit associations (ROSCAs and ASCAs), traders, moneylenders and other individuals; and public sector programmes that have developed financial and nonfinancial services for their clients (Asiama and Osei, 2007). One of the informal microfinance schemes which have been the financial refuge of the poor and the financially excluded in Ghana is the "susu" scheme. Much work has been done on its impact on small and medium scale enterprises (Alabi et al., 2007; Basu et al., 2004; World Bank, 2007). However, one of the murky areas that have not engaged the attention of researchers is the possibility of predicting the daily/weekly contribution. The current study, therefore, seeks to explore this virgin area of the microfinance literature by answering two main research questions:

- Between male and female "susu" contributors whom should "susu" institutions target?
- Are there some socio-economic factors that positively and significantly determine the amount of 'susu' contribution in Ghana?

The rest of the paper is organized into sections. The first section presents the description of the "susu" scheme in Ghana as a source of fund mobilization. This is followed by research methodology section. Presentation of the results and discussion section is next in line. The paper ends with conclusions and policy implications of the findings of the study.

2   THE "SUSU" SCHEME IN GHANA

The Ghana Co-operative "Susu" Collectors Association, (GCSCA) established in 1990, is the apex body superintending the operations of the "susu" scheme in Ghana. The association has identified the objectives of the "susu" scheme as follows: providing mobile savings collection services for individuals and groups in urban and rural areas; providing appropriate financial intermediation for Micro/Small-scale Enterprises (MSEs) and Informal Sector Enterprises (IFEs) who cannot leave their wares; inculcating a savings habit among the rural and urban poor; providing an opportunity for financial intermediation between the formal banking sector and micro/small scale entrepreneurs; and providing individuals with self-employment opportunities as "Susu" collectors (The World Bank Group, 1999).

"Susu" as one of the microfinance schemes in Ghana is thought to have originated from Nigeria and spread to Ghana in the early twentieth century (Asiama and Osei, 2007). It is an informal financial identification for daily or weekly collection of deposits which is prevalent on the West African markets (Alabi et al., 2007). It can be described as a form of banking because it is a system of trading in money which involves regular and periodic collection of fixed amount of deposits that are made available to the owners after a specified period of time or when required or to borrowers within the scheme at a fee. Interest on deposits is almost non-existent (Aryeetey, 2008).   Borrowing under the "susu" scheme does not require

collateral; it relies on a guarantee system to reduce risks associated with 'clean lending' (Alabi et al., 2007). However, borrowing is short periods (Aryeetey, 2008). The essence of the "susu" scheme is to help contributors to protect their daily earnings from competing claims and ensure working capital to restock supplies at the end of the month.

In terms of collection of daily or weekly deposits, the scheme uses two main methods: independent/private (non-salaried) collectors and salaried/commissioned staff. Under the independent (non-salaried) collector's method, the collector undertakes daily door-to-door collection of agreed fixed amount from clients for a cycle, usually one month. In each cycle the collector's reward for rendering this service is a day's deposit of each client. For example, if in each day a client contributes one Ghana cedi then at the end of the contribution cycle the collector will subtract one Ghana cedi from the contributor's total deposit as service fee. In Ghana, it is now common to find that large numbers of individual "susu" collectors have established offices (kiosks) at various points in cities and towns where their clients can actually walk in to make deposits and engage in other transactions (Aryeetey, 2008). The major risk inherent in dealing with private collectors is the possibility of the collectors absconding with contributions. However, evidence suggests that the private collectors have been found to be more aggressive in reaching out to more potential savers since their profit is contingent on the number and per capita daily contribution of their clients. Under the salaried/commissioned staff deposit collection, the collecting agents are full-time employees of the microfinance institution (MFI) who undertake the door-to-door collection for and on behalf of the MFI for basic salary. This is the practice at most banks (CHORD, 2000). To provide customized service, most "susu" collectors begin mobilizing daily deposits around noon each day which provides the clients with an opportunity to transact business and earn some income before saving. This strategy offers convenience for the rural and urban poor women whose income is too low to deposit large amounts of money with the formal banking institutions (The World Bank Group, 1999).

Basu et al. (2004) identify four different types of "susu" institutions that have influenced the operations of MFIs in Ghana. These are **"susu" collectors** who offer a saving vehicle by collecting daily amounts voluntarily saved by their clients, which they return at the end of the month, minus one day's amount as a commission.; **"Susu" associations** which are either (i) rotating (ROSCAs), collecting savings from their members and allocating them to each member in turn, or (ii) accumulating associations, which allow regular contributions to be accumulated, to cover the lump sum costs of such special future events as funerals; "**Susu**" **clubs** which combine the modus operandi of susu collectors and susu associations operated by a single agent in which members commit to save a pre-defined amount over the medium-term (50- to 100-week cycles) and pay commissions on each payment and fees when they are advanced the targeted amount before the end of the cycle; and **"Susu" companies** which are more recent (late 1980s) and registered. In addition to savings collected using traditional "susu" collectors, "susu" companies provide loans after a minimum saving period.

Economically, the "susu" scheme is making immense contributions to the development and sustenance of micro and small enterprises (MSEs) in Ghana. In addition, the scheme is acclaimed to have the capability to swab excess liquidity through its savings mobilization methods. Consequently, the scheme is now being recognized and incorporated into some formal financial institutions as a deposit- loan system using "susu" collectors and operators (Basu et al.,2004). A number of MFIs in Ghana including rural banks and credit unions have incorporated the scheme into their deposit mobilization strategies.

According to the World Bank (1994) "susu" scheme is a major source of finance for most micro and small scale businesses. The scheme cuts across a wide range of socio-economic or occupational groups such as farmers, petty traders, artisans, food processors and salaried workers. For many petty traders, market women, apprentices and artisans, "susu" is alleged to be their trusted and reliable source of starting, sustaining and growing their businesses (Alabi et al., 2007). These groups are generally within the low income bracket and many of them are women (CHORD, 2000).

Evidence abounds that microfinance beneficiaries spend their income on domestic financial obligations. Johnston and Morduch (2008) find that low-income households often apply loans to household needs, including school fees, medical treatment, daily consumption needs, and social and holiday expenses. Female entrepreneurs tend to allocate a greater share of profits for family and child welfare, and that there is a strong relationship between female entrepreneurial activity and children's welfare (Kessey, 2005). Women have a predisposition to use profits to meet family needs rather than to reinvest (Downing, 1990). Evidence abounds that women have spend more of their income on their households; therefore, by helping women increase their incomes, you are improving the welfare of the whole family" (Cheston and Kuhn, 2002).

3 RESEARCH METHODOLOGY

3.1 The Model
The cumulative multinomial logit regression model is utilized to relate the probability of a "susu" contributor contributing any of the five levels of contribution (five Ghana cedi contribution; four Ghana cedi contribution; three Ghana cedi contribution; two Ghana cedi contribution; and one Ghana cedi contribution) to socio-economic factors: number of years of contribution, years in business, gender and marital status. The cumulative multinomial logit model is expressed as follows:

$$Y = y_i \leftrightarrow \alpha_i - 1 < U \leq \alpha_i, i = 1, \ldots, m \qquad [1]$$

Where $-\infty = \alpha_0 < \alpha_1 < \ldots < \alpha_{m = \infty}$. It is assumed that the latent variable U is determined by the explanatory variable vector X in the linear form $U = -\beta'x + \epsilon$ where β is a vector of regression coefficients and ϵ is a random variable with a distribution function F. It follows that

$$Pr\{Y \leq y_i | x\} = F(\alpha_i + \beta'x) \qquad [2]$$

Description of the variables used in the model has been presented in Table 1 below:

Table 1

Description of variables

Variable	Description
Dummy for Contribution (dependent variable)	= 1: One Ghana cedi Contribution
	= 2: Two Ghana cedi Contribution
	= 3: Three Ghana cedi Contribution
	=4: Four Ghana cedi Contribution
	=5: Five Ghana cedi Contribution or higher
Dummy for gender (GENDER)	=1: Female; =0: Male
Dummy for marital status (MSTATUS)	= 1: Married; =0: Otherwise
Years in business (YRSINBUS)	= Continuous variable
Number of years of contribution (CONTYRS)	= Continuous variable

5% significance level is assumed.

The daily or weekly contribution of contributors is the predicted outcome and is measured at five levels: five Ghana cedi contribution; four Ghana cedi contribution; three Ghana cedi contribution; two Ghana cedi contribution; and one Ghana cedi contribution. The hypothesized independent variables are years of contribution (YRSCONT); years in business (YRSINBUS); marital status (MSTATUS); and gender of respondents (GENDER). The variables MSTATUS and GENDER are dummy variables.

3.2 Data and Sampling

Data for the study were collected through a cross-sectional "susu" survey undertaken by the authors using questionnaire as the data collection instrument. A sample size of 1,630, comprising 697 male and 933 female contributors was used in the study. This sample size was arrived at after editing two thousand questionnaires for errors and inconsistencies. Thus, the successful response rate was approximately 82%. The sampling procedure employed was simple random sampling in which "susu" contributors at various market centres in Kumasi and Takoradi were interviewed. The decision to administer the questionnaire at market centres was informed by the literature. According to the World Bank Group (1999), market centers are locations with a large density of enterprises, especially those operated by women. The questionnaire was administered to respondents after they had indicated that they were "susu" contributors. The 'susu' scheme cuts across a wide range of socio-economic or occupational groups such as farmers, petty traders, artisans, food processors (CHORD, 2000). Thus, respondents in the survey were petty traders, artisans, food processors, retailers, and dealers.

4 ESTIMATION RESULTS AND DISCUSSION

The Pseudo R-square statistics reported in appendix A show 17.9%, 18.8% and 6.6% for Cox and Snell, Nagelkerke and McFadden statistics respectively. The model fitting information and the Likelihood Ratio Tests results shown in appendix A collectively rule out the joint hypothesis that "all coefficients of explanatory variables equal zero" and accentuate the robustness of our model.

As shown in Table 2, the number of years of contribution is statistically significant across three models. Evidently, the probability of a "susu" contributor in Ghana contributing one Ghana cedi or two Ghana cedis or three Ghana cedis relative to contributing five Ghana cedis decreases as the number of years of contribution increases by one year. No statistically significant relationship has been found between the number of years of contribution and four

Ghana cedi contribution. It can, therefore, be contended that as the number of years of contribution increases a "susu" contributor in Ghana is likely to contribute five Ghana cedis or higher daily or weekly. This contribution behavior strikes a chord with the concept of logical incrementalism (Quinn, 1980). The benefits of the "susu" scheme may not be known at the commencement of contribution. Thus, to mitigate his or her risk the contributor would attempt to experiment with smaller amounts and would gradually increase the daily contribution as he or she begins to experience the benefits of the scheme. Emblazoned across this logical incrementalist approach is risk consciousness among "susu" contributors in Ghana. Despite their low levels of education it appears that they appreciate the concept of risk in financial management which is commendable. It can be inferred from this finding that "susu" collection institutions in Ghana interested in increasing their turnover should target their marketing campaigns at existing contributors since they are more likely to increase their daily contributions than new contributors.

The number of years a contributor has been in business is statistically significant across two-Ghana-cedi contribution and three-Ghana-cedi contribution groups. The negative odds ratios indicate that the multinomial log-odds for a "susu" contributor to contribute two Ghana cedis or three Ghana cedis would decrease if a contributor were to stay in business for an additional year. In other words, as a "susu" contributor spends more years in business the probability that he or she will contribute five Ghana cedis is high. The number of years in business of the contributor is positively related to one Ghana cedi contribution, implying the log-odds of a "susu" contributor in Ghana preferring to contribute one Ghana cedi to contributing five Ghana cedis would be positive. However, this is statistically insignificant.

Marital status is statistically significant across one-Ghana-cedi and two-Ghana-cedi contribution groups but is statistically insignificant across three Ghana cedi and four Ghana cedi contribution groups. The negative relationship between marital status and one-Ghana-cedi contribution and two-Ghana-cedi contribution suggests to us that married "susu" contributors in Ghana are more likely to prefer contributing five Ghana cedis or higher than their unmarried (single) counterparts. One possible interpretation of this finding is that because married couples have both business and domestic obligations such as providing for the upkeep of their homes and paying children's school fees they contribute more as insurance against these obligations (Alabi et al., 2007). The propensity for low-income households to spend their income on their domestic obligations has been established. Johnston and Morduch (2008) find that low-income households often apply loans to household needs, including school fees, medical treatment, daily consumption needs, and social and holiday expenses. This presupposes that "susu" institutions that desire to increase their daily turnover must target their marketing strategies at married prospects.

Gender is positive and statistically significant across one-Ghana-cedi contribution and two-Ghana-cedi contribution. It is, however, positive but statistically insignificant at three Ghana cedi contribution. Its relationship with four-Ghana-cedi contribution is negative and statistically insignificant. The multinomial logit for female contributors relative to male contributors would be 0.685 and 0.397 unit higher for preferring to contribute one Ghana cedi and two Ghana cedis respectively, given all other predictor variables in the two models are held constant. In other words, female contributors are more likely than their male contributors to contribute one Ghana cedi or two Ghana cedis. One possible interpretation of this finding is the issue of the females meeting family obligations, making them unable to contribute more. This is because female entrepreneurs tend to allocate a greater share of profits for family and

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child welfare, and that there is a strong relationship between female entrepreneurial activity and children's welfare (Kessey, 2005). Women have a predisposition to use profits to meet family needs rather than to reinvest (Downing, 1990). On the other hand, this finding may affirm income inequality between males and females in Ghana and reinforce the need for more poverty reduction interventions to be targeted at women, especially the uneducated or less educated but productive ones. Apart from enhancing the quality of family life in Ghana, empowering such women will also promote economic development.

Table 2: Multinomial Logistic Regression Analysis of "Susu" Contribution in Ghana

Contribution day or		B	Std.	Wald	df	Sig	Exp(B
One Ghana	Intercep	1.406	.236	35.64	1	.000	
	YRINBU	.006	.017	.125	1	.723	1.006
	CONTYR	-.823	.079	108.938	1	.000	.439
	[MSTATUS=0	.721	.184	15.36	1	.000	2.056
	[MSTATUS=1	0 [a]	.	.	0	.	.
	[SEX=0	-.685	.175	15.32	1	.000	.504
	[SEX=1	0 [a]	.	.	0	.	.
Two Ghana	Intercep	1.353	.195	47.92	1	.000	
	YRINBU	-.031	.013	5.45	1	.020	.969
	CONTYR	-.370	.057	41.88	1	.000	.691
	[MSTATUS=0	.451	.148	9.24	1	.002	1.570
	[MSTATUS=1	0 [a]	.	.	0	.	.
	[SEX=0	-.397	.137	8.41	1	.004	.673
	[SEX=1	0 [a]	.	.	0	.	.
Three Ghana	Intercep	.130	.251	.269	1	.604	
	YRINBU	-.044	.019	5.44	1	.020	.957
	CONTYR	-.205	.074	7.624	1	.006	.814
	[MSTATUS=0	-.069	.197	.124	1	.725	.933
	[MSTATUS=1	0 [a]	.	.	0	.	.
	[SEX=0	-.153	.176	.753	1	.385	.858
	[SEX=1	0 [a]	.	.	0	.	.
Four Ghana	Intercep	-	.307	22.072	1	.000	
	YRINBU	-.006	.016	.125	1	.723	.994
	CONTYR	.027	.080	.112	1	.738	1.027
	[MSTATUS=0	.341	.214	2.538	1	.111	1.406
	[MSTATUS=1	0 [a]	.	.	0	.	.
	[SEX=0	.222	.190	1.366	1	.242	1.248
	[SEX=1	0 [a]	.	.	0	.	.

a. This parameter is set to zero because it is redundant. The referent group is five Ghana cedi contribution.

5   CONCLUSIONS AND RECOMMENDATIONS

The above results lend support to some conclusions about "susu" contribution behavior in Ghana. First, despite the financial and intellectual depravity of most "susu" contributors in Ghana they seem to have some appreciation for risk in financial management. This is evident in their apparent adoption of logical incrementalist approach to contribution, preferring to begin their contribution with smaller amounts before contributing larger amounts as years go by. Obviously, with little capacity-building support, these "susu" contributors who are engaged in micro, small and medium scale enterprises will be able to practice effective financial management in their businesses which will, in turn, promote economic growth in Ghana. Second, male contributors contribute higher amounts of money to the "susu" scheme than their female counterparts. One policy implication for "susu" operators in Ghana is that if they want to increase their profitability they should focus their marketing activities on male prospects. On the part of the Government of Ghana and other international organizations committed to bridging the income gap between males and females it appears that they are far from achieving their targets. The income inequality between males and females still persists in Ghana which calls for more concerted efforts at addressing it. Third, evidence proffered in this paper suggests that the amount of daily or weekly contribution of a "susu" contributor in Ghana is determined by the number of years of contribution, number of years in business, marital status and gender. The policy implication of this conclusion is that "susu" institutions that aspire to scale up their operations should rivet their interventions on these factors.

The authors recommend that more studies should be conducted for more insights into the current findings. The use of different dataset in Ghana will provide fresh perspectives to the findings of this study which will enrich the microfinance literature. The authors also recommend the application of the model to any of the countries in the West Africa sub-region where the "susu" scheme is practiced as this will provide international perspective on the current findings.

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APPENDIX   A

Pseudo R-Square

Cox and Snell	.179
Nagelkerke	.188
McFadden	.066

Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	2155.660			
Final	1834.532	321.128	16	.000

Likelihood Ratio Tests

Effect	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	1834.532[a]	.000	0	.
CONTYRS	1980.913	146.382	4	.000
YRINBUS	1846.328	11.796	4	.019
SEX	1859.202	24.670	4	.000
MSTATUS	1857.457	22.925	4	.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

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TRANSPORTATION SECTOR IN TURKEY: FUTURE EXPECTATIONS ABOUT RAILWAY TRANSPORTATION IN TURKEY

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ABSTRACT
During the economic development process, it is observed that services sector has gained importance in many importances. In the services sector, transportation is the sector that the most investment is made and the most added values are created. With various carrying types, transportation sector holds considerable share both in domestic and foreign trade with cargo transportation and in tourism and urban transportation with passenger carrying. As for the transportation sector in Turkey, in the early years of the Republic, short range railway and seaway transportation is observed to be made in the Western Anatolia. Upon the establishment of the Republic, much importance was put on railway transportation and the railway systems which would provide east-west and north-south connection were built. In early years of the 1950s, importance was started to be given in highway construction, and considerable improvement was achieved in seaport and airport construction. Overland transportation, after the years of 1950s, has been the most widely used transportation type that exhibited development due to the high cost of the substructure investments in terms of railway transportation. In recent years, Turkey has been experiencing important developments related with railway transportation. Due to playing great role of railway transportation in Turkey's effectiveness in carrying international cargo, being on an important location in the international corridor, increasing the public investments and allowances for the railway transportation, works has been started especially in terms of international cargo transportation. In this study, by examining the general structure of the transportation sector in Turkey, foresight of railway transportation until 2025 has been aimed to be made. In this frame, it is aimed to determine the role of the railway transportation in Turkey's potential economic development.

Keywords: Logistics, Railway Transportation, Transportation

1   INTRODUCTION
Transportation can simply be defined as moving people or goods to fulfill any requirement in a way that would bring benefit in time and space (Barda, 1964, p. 5). Transportation activities

which are the key factor of economic, social and cultural activities are a service activity whose demand is created by other sectors. The most important sectors which create demand can be named as industry, trade, agriculture and tourism. In addition, transportation is sector which plays effective role on productivity of all sectors (Kabasakal and Solak, 2009, p. 27).

Transportation sector is one of the important sectors for arranging product flow, enabling sustainability of this process and being a sector which generating employment. Within economic structure, improvement of transportation opportunities has positive effect on employment structure, investments and production level in macro-economic sense and on activities, sales and distribution process of enterprises in micro economic sense (Nalçakan, 2009, p. 34).

Transportation systems and networks serve in freight which is the subject of world trade. It is seen that transportation networks, systems and transportation ways play effective role in determination of economic and political strategies of nations (Nalçakan, 2009, p. 34). Improvements in transportation created great changes in nations economically, politically and socially. In this process, the first great improvement was enabled in the field of railway transportation systems. By providing dynamism to the process; the breakthrough which began in the field of railway transportation both brought solutions for labor and raw material problem and market requirement of infant industry, and made great contributions by enabling mass production in the fields out of industrial centers.

The main aim of this study which was carried out based on the importance of railway transportation within transportation systems is to analyze the development of railway transportation in Turkey and put forwards expectations in railway transportation until 2025. For this aim, first of all, developments in transportation sector in Turkey were examined generally. Then the current position of railway transportation in transportation sector was aimed to determine by pointing out superior and disadvantageous aspects of railway transportation. In the last section foresight of railway transportation until 2025 was made and the study is concluded with overall assessment and suggestions.

2   TRANSPORTATION SECTOR IN TURKEY

Transportation sector which has become the one that creates the most added values for national economies has an important place for Turkey as well. One of the most important factors which makes transportation sector that has around 14% share within GDP as of 2010 and has 12.2% growth compared to previous year (TOBB, 2012) special for Turkey is its geographical location. When the geography of Turkey is considered together with its environment, it is seen that Turkey is located in a place where political, military, demographic, economic and commercial power balances change continuously, trade and raw material flow is carried out intensely in the sense of global competition (Nalçakan, 2009, p. 37). Turkey which serves as a bridge between Asia, Europe and Africa is like a basis both in freight and passenger transportation and can serve in all types of transportation. Turkey especially has important potential in the sense of shores and harbor with broad hinterland in order to do business with overseas countries through seaway.

However Turkey's bringing this superiority in transportation sector to more developed economic level depends on better evaluating its potential in this sector. In this scope, general characteristics of transportation sector can be summarized as such (Aktan and Dileyici, 2005, p. 18):

- Causing great infrastructure requirements and high fixed cost,
- Providing special benefits in economy by spreading positive externality,
- Increasing mobility of goods and services,
- Multi-dimensional service (being both for transportation of passengers and freight).

Due to increase of international trade, movement of goods among markets has gained importance today, conditions of competition have changed and transformed into rather dynamic structure. At this point, costs of transportation have to be considered in order not to cause malfunction in operation of comparative superiorities with market mechanism (Hummels, 2006, p. 24).

Investments of transportation infrastructure which is the most important factor in providing effectiveness of transportation sector requires enduring costs so high that a single enterprise or organization cannot overcome. For this reason, such kind of investments is generally regarded as those undertaken by the public (Han and Kaya, 2002, p. 248). Studies in literature show that economic effectiveness of railway transportation within all transportation types is much more compared to highway investments (Kabasakal and Solak, 2010, p. 134). This advantage of railways has important effects especially in mobility of goods and services.

However priorities in Turkish transportation policy have changes considerably since the early years of Turkish Republic. Railway transportation undertook the most important role in improvement of infrastructure of public transportation until 1950. However, the dominant role of railway transportation has decreased, leaving its superiority to highway transportation. While 78% of freight was carried out with railways in 1950, this rate dropped down to 5% in 1999 (TÜİK, 2006).

3 DEVELOPMENT OF RAILWAY TRANSPORTATION IN TURKEY AND POLICIES ADOPTED

Beginning of railway transportation in modern sense dates back to the discovery of locomotive in 19th century. The first steam locomotive was invented by Richard Trevithick in England in 1804. Afterwards, especially English, American and French people speed up building railway lines among various cities and region in their own country and other European countries followed these innovations. It is seen that these countries which are powerful in railway transportation are also powerful in economy (Murat and Şahin, 2010, p. 45).

Rail system which is used in intracity, intercity and international passenger and freight transportation has superior aspects compared to other types of transportation. Being an alternative for solution of traffic density, being more advantageous than other transportation systems in the sense of energy consumption, having large capacity in transportation of passengers and freight, having less damage to environment, having fixed price guarantee for long terms and having equipment which is not easily influenced by weather conditions are among these superior aspects. In addition to this, there are also weaknesses of railway transportation. Most important ones are the necessity that nearly all the stations should be large and comfortable, that the construction of roads and facilities, supply of vehicles have

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high cost that cannot be easily overcome by private corporation, that through trip takes long time and that railway transportation does not enable door to door delivery (Koban and Yıldırır Keser, 2011, pp. 223–224).

The history of railway transportation in Turkey goes back to Ottoman Empire. However, planned developments started in turkey with the foundation of Turkish Republic in 1923. 1000 km railway construction was completed and put into practice until 1929 and nearly 200 km. railway construction was completed until 1940. However the following process was not that fast and the total length of railway constructed between 1940 and 1950 was only 300 km (Murat and Şahin, 2010, pp. 75–76).

1950's are regarded as stagnation period in railway transportation. It is thought that this stagnation has two important reasons. First of all; regression caused by II. World War and Turkey's inability in sustaining its advances in coal, iron, steel and machine industry had negative effects in its advances in railway. In fact, it must be remembered that development of railways in inland passenger and goods transportation depends on analysis of industrialization process rather than aims written in development plans (Kaynak, 2002, p. 39). The second reason for stagnation in railways is thought to be the advances in projects about highways within the frame of Marshall Plan. Similarly, due to production and consumption of consumer goods becoming widespread within economic structure of Turkey, it has become compulsory concentrate on highway transportation which enables fast and convenient door to door transportation of such kind of freight (Gerçek, 1999, p. 39).

After 1950, highway transportation gained superiority over railway transportation. Between 1952 and 1962 the budget of T.R General Directorate of Highways began to compose 10% of government budget. After 1960's, as a result of transportation policies based on highways, goals anticipated for railways could not be achieved. Coordination could not be enabled between sub-systems of transportation and investments made on highways sustained its effectiveness. In the beginning of 1970's railway transportation experienced important recession due to establishment of motor vehicle industry, importance given on highway construction, starting ring-road projects and Bosporus Bridge which connects Asia and Europe being put into service (Çetin et al., 2011, p. 137). As a result, only 30 km. new line in average could be constructed per year between 1950 and 1980 (TUSİAD, 2007, p. 117).

With "1983-1993 Main Plan for Transportation" which is the first comprehensive national transportation plan in Turkey it was aimed to decrease highway transportation share from 72% to 36% and increase railway share within freight transportation to 30% but it could not be accomplished.

When the share of transportation types in inland passenger and freight transportation between 1950 and 2010 are observed (Table 1) the recession in railway transportation and importance given to highway transportation can be seen (TCDD, 2011: 9).

Table 1: The Share of Transportation Types in Freight and Passenger Transportation: 1950-2010 (%) (TCDD, Railway Sector Report, 2011)

YEARS	Freight (Netton-Km)				Passenger (Passenger-Km)			
	Highway	Railway	Seaway	Airway	Highway	Railway	Seaway	Airway
1950	25	68,2	6,8	0,0	50,3	42,2	7,5	0,0
1960	45	52,9	2	0,1	72,9	24,3	2	0,8
1970	75,4	24,3	0,2	0,1	91,4	7,6	0,3	0,7
1980	88	11,8	0,1	0,1	94,7	4,6	0,2	0,5
1990	81,7	9,8	8,9	0,1	96	2,5	0,1	0,9
2000	90	5,4	4,4	0,2	96	2,2	0	1,8
2008	89,4	5,2	5,5	No Data	97,9	1,7	0,4	No Data
2009	89,1	5,1	5,8	No Data	97,9	1,6	0,4	No Data
2010	88,9	5,3	5,9	No Data	97,8	1,6	0,7	No Data

Investments in transportation sector being based on highway from 1950 until 2003 brought together structural problems such as inadequacy of railway lines, low standards of infrastructure, inadequacy of railway vehicles in number and quality, scarcity of lines with signal and electric, inadequacy of expert staff and problems experienced in integration and competition with other transportation types (TCDD, 2011, p. 9).

When the current situation in railway transportation is evaluated in Turkey, it is seen that of all 81 cities only 37 of them are connected with railways. 28% of the population does not have railway access. There is no railway connection in some of the most important industrial and commercial cities such as Bursa. There is no railway connection of specific harbors such as Trabzon in The Black Sea, Antalya in the Mediterranean and Tekirdağ in The Aegean Sea. These harbors which cannot make railway connection with their hinterlands are not able to use their potential in transportation of both passengers and freight (Ülgen et al., 2007, p. 138).

With the funds provided for TCDD (Turkish State Railways) between 2003 and 2011 which is the basic executive organ in railway transportation, it was aimed to enable economic and secure railway transportation and increase share of TCDD in transportation of passengers and freight by increasing its competition power against other types of transportation. In this scope, aims were determined in order to put high-speed train lines into operation, enhance current lines and vehicle parks, targets were detected for private sector to carry out railway management and these aims were achieved considerably. In this frame, by the end of 2011 TCDD has 11.112 km. conventional line; 8.770 km. being conventional mainline and 2.342 km. being secondary line and 888 km. high-speed train line; 872 km. being high-speed train line and 16 km. being high-speed line within station, thereby has 12.00 km. railway line in total (TCDD, 2011, pp. 9–14).

Positive results were taken from studies carried out in order to involve private sector into railway sector, which is amongst the aims of TCDD; while the number of wagons belonging to private sector and operated on TCDD lines was 771 in 2003, this number increased up to 2.870 as of 2011. Transportation made by wagon belonging to owners in 2011 reached 5, 6

million tones and its rate within total transportation reached 25% (TCDD, 2011, p. 19). As a result, as a natural result of unplanned practices, there has been serious imbalance between types of transportation, highway transportation became important both in transportation of passenger and freight. This situation not only caused increase in transportation costs but also resulted in traffic density on highways and increases of traffic accidents which results in important loss of life and property.

Within the scope of 9th Five-Year Development Plan for 2007–2013 period, it is seen that railway transportation is given more important within transportation policies. In this frame, practices were initiated in order to consider system holistically in forming an effective transportation infrastructure and improve important harbors as logistic centers by shifting freight transportation toward railways (DPT, 2006, p. 70). Studies upon plan and actualization of logistic centers within TCDD have been carried out since 2007. Logistic centers are specific centers where all the activities about transportation, logistic and freight both in national and international level are conducted by various operators. Transportation focuses on intermodal activities and logistic activities in logistic centers and these centers are generally chosen from regions which are out of metropolitan areas and close to different types of transportation (Gülen, 2011, p. 143).

Within the scope of 9th Five-Year Development Plan, there were also issues discussed such as developing private sector train management on railways and liberalization in making use of managem1ent mentality of private sector; initiation of passenger transportation by high-speed train on a core network Ankara being the center and then through İstanbul-Ankara-Sivas, Ankara-Afyonkarahisar-İzmir, Ankara-Konya corridors and application of public-private sector cooperation in construction and management of lines to be built on these networks (DPT, 2007, p. 71). The legislation about inclusion of third person in State Railway line which terminates the monopoly of TCDD in passenger and freight services was put into force in April, 2005. However it is seen that application mechanisms in this area are not sufficient (Gülen, 2011, p. 113).

The most important project about railways in Turkey which is in progress is the project Marmaray which connects Europe to Asia through a railway tunnel passing under Bosporus. Currently Marmaray is one the main projects of transportation infrastructure throughout the world. With Marmaray it is aimed to relieve traffic flow in the city by transportation of 75.000 passengers per hour with 440 wagons on 76 km. railway line and increase the duration of travel between two sides (Ülgen et al., 2007, p. 138). With the actualization of projects such as Marmaray which is an important step towards adjustment with high-speed trains of European Union, Ankara-İstanbul High-Speed Train, Kars-Tbilisi Projects; it is expected to enable direct, fast and economic railway connection from Europe to Asia, from West to East (TCDD, 2011, p. 21).

There are various transportation networks which are alternatives of each other throughout the world. Considering together with the fact of globalization, it is not possible to think different regions of world independent from each other. This dependency should not be ignored in configuring transportation infrastructure and networks which have private importance in providing benefit of time and space for goods and services. International transportation networks which were built within this frame have great importance in the sense of transportation sector in Turkey. Turkey is on the transition point in international railway networks and included in two main projects of transportation network. The first one is the

Project of Trans Asian Railway – TAR. This is a project which was started in 1960's and connects 28 Asian countries between Singapore and Turkey uninterruptedly with 114.000 km. railway network. The main purpose is to provide effective railway transportation service in freight and passenger transportation between Asia, Pacific and European regions. Another important purpose of the project is to create added value by way of providing harbor connection to shoreless countries (UESCAP, 2009, p. 1). The second one is Trans-European Railway Project- TER in Europe. The project which was started in 1990 aims to improve infrastructure of railway transportation, provide standards about railway transportation among countries, use recent technologies about railway transportation (UNECE, 2006, p. 58). There is a requirement for important railway projects in order to enable functionality to Turkey, which serves as a bridge due to its geographic location and provide sustainability of transportation networks between Europe-Asia. Projects carried out in this scope, as observed in Map. 1, are Marmaray whose construction has started, İstanbul-Basra Railway, North Railway, Hejaz Railway, Southeast Asia Railway, Kars-Tbilisi, Baku Railway, Caucasian-Samsun-Basra Railway corridors (TCDD, 2011, p. 20–21).

4 FUTURE EXPECTATIONS ABOUT RAILWAY TRANSPORTATION IN TURKEY

7 data about sector were used in order to put forward expectations about railway transportation in Turkey. These are "number of stations" on railways, "length of lines", "netton", "freight income", "number of passengers", "passenger income". For data, first of all stationary was analyzed with unit root rest with a structural break. Then, the suitable model was chosen according to absolute and relative error statistics. Finally, compatibility of models with data was analyzed (ex-post analysis) and future estimations of these models were made (ex-ante analysis).

4.1 Unit Root Test with a Structural Break

Perron (1989) proposed a unit root test allowing for a structural break with three alternative models: crash model, changing growth model and the change both in the intercept and the slope. Several studies have found that the conventional unit root tests fail to reject the unit root hypothesis for the series that are actually trend stationary with a structural break. On the other hand, the Perron (1989) test has been generally criticized for treating the time of breaks as exogeneous. Zivot and Andrews further developed the Perron unit root test that considers the breakpoint as endogenous. To test for a unit root against the alternative of trend stationary process with a structural break both in slope and intercept.

Table 2: The Zivot and Andrews Unit Root Test results

Series	T'_B	Lag	μ	θ	B	Γ	α	SSR
Number of Station	1988	5	14.050 (5.05)	-0.123 (-4.93)	0.085 (6.48)	-0.015 (-5.47)	-0.64 **(-5.1)*****	0.0312
Line Length	1974	4	10.256 (8.58)	0.125 (7.84)	0.036 (5.23)	-0.065 (-3.42)	0.245 **(-6.89)****	0.0135

The numbers in parantheses are t-statisics. The t-statistics for α is for testing α = 1. (***) and (**) denote significance at 1% and 2.5% levels respectively, using the critical values from Zivot and Andrews table

As can be seen from Table 1, there is strong evidence against the unit root hypothesis. The ZA results indicate that the breakpoint occurs in 1988 for Number of station series, in 1974 for Overall total series, in 1974 for line length series, in 1932 for passenger wagon series and

in 1974 for freight series. To find out whether the inferences are affected by a different lag length procedure, the Schwarz bayesian criterion, as suggested by Lee and Strazicich (2001) was also used to determine the lag length. The break point was determined by the minimum SBC value. Then, the SBC-based unit root test was conducted by the t-statistic testing the null hypothesis $\alpha=1$. The minimum SBC's indicate same breakpoints in ZA procedure.

Table 3: Appropriate Models for Series
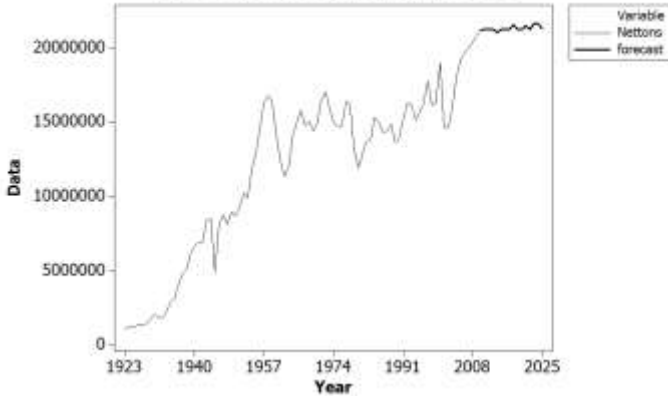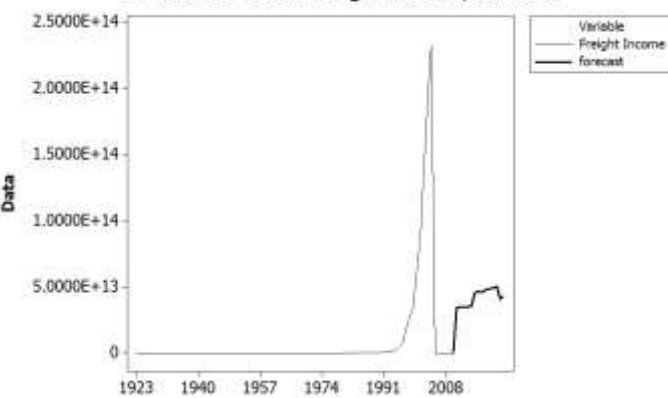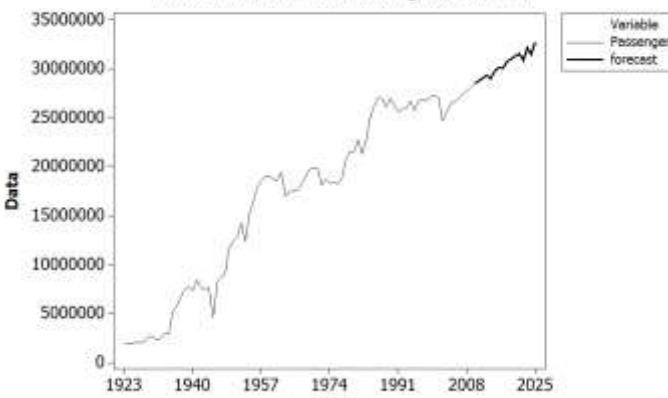
Series	Model	Series	Model
Number of Station	SES	**Passenger**	ARIMA(1,1,0)
Line Length	Linear Trend	**Freight**	AR(1)
Nettons	ARIMA(1,1,0)	**Freight Income**	ARIMA(1,1,0)
Staff	AR(1)		

Results of ex-ante analysis of 7 data observed in order to make prediction for railway transportation of passenger and freight until 2025 in Turkey are given in Table 4.

Table 4: Ex-ante Forecasts

	When the structure of series is observed, it is seen that there is an increase until 1970's. As a result of transportation policies based on highway between 1970 and 2000, railway has lost importance and many terminals and stations became inactive. With the beginning of high-speed train project in 2005 and the importance given to railway, it is expected that effectiveness of terminal, station and train stops which were built by TCDD and operate in the current situation would increase. ARMA (1, 1) model is suitable for the period until 2025.
	Transportation policies based on highway in 1970's decreased construction of railway line importantly. As a result of policies adopted in 2005 and afterwards, and actualization of short and medium term projects and concentrating on railway investments within transportation types; increase trend is expected in main lines. This result was attained by using linear trend model for the period until 2025. The trend of series in 1923-2010 will continue until 2025.

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Time Series Plot of Nettons; forecast

Transportation policies based on highway in 1970's caused important decrease in netton amount. Policies applied within the frame of 8th Five-Year Progress Plan caused increase in netton amount after 2005. This situation is expected as an increase trend until 2025 with the actualization of planned projects. This increase trend in series was found considering ARMA (1, 1, and 0) time series model. This situation would also cause increase in freight income.

Time Series Plot of Freight Income; forecast

As a result of stagnation analysis made for series it was concluded that series was stationary within time. ARMA (1, 1) model was suitable for future foresights of series.

Time Series Plot of Passenger; forecast

Within the scope of expectations until 2025, an important increase is expected in the number of passengers. The main reason of that can be defined as completion of high-speed train projects and actualization of them in short and medium term. At the same time, planning railway investments in intracity transportation would increase number of passengers. An increase in passenger number is also expected according to this. This expectation supports past values of series. As a result of analysis, ARIMA (1, 1, and 0) model was used for future estimation.

As a result of stationary analysis done for series, it was concluded that series was stationary within time. ARMA (1, 1) model was found to be

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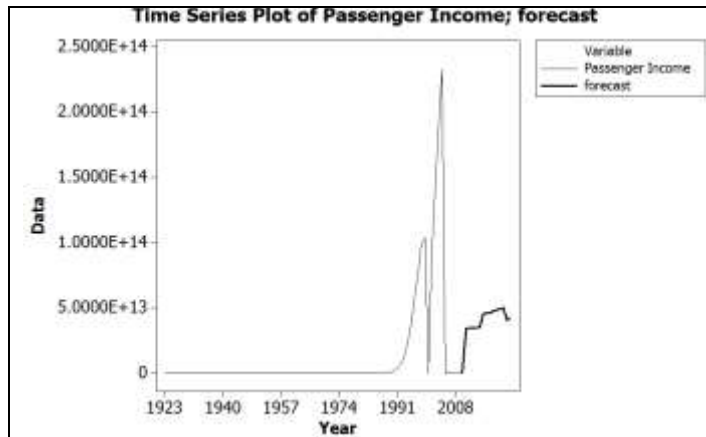
Time Series Plot of Passenger Income; forecast 	suitable for future foresights of series.
Time Series Plot of Staff; forecast 	In the graphic, there is a decrease in the number of TCDD staff after 1974 and important increase is expected in staff number until 2025. The series display typical auto correlational structure between 1923 and 2010. It is seen that this structure will continue until 2025. Despite the aim of increasing investments in railway transportation, it is thought that not achieving important increase in staff number would not have negative effect in sector economically. Because it is thought that apart from technological developments, staff of TCDD which is open to competition due to privatization would be more efficient. In fact, although staff number does not increase much, the expectation of increase of passenger and freight income, as mentioned before, supports this thought.

Results of ex-post and ex-ante analysis of these data about railway passenger and freight transportation in Turkey are summarized in Table 5 in five-year periods.

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Table 5: Ex-Post and Ex-ante Forecasts

Series Name	2000	2005	2010	2015	2020	2025
Number of Station	908	718	725	**825**	**850**	**885**
Line Length	10922	10954	11052	**12564**	**12547**	**12625**
Nettons	18980000	19195000	19255000	**20120000**	**22145000**	**22250000**
Freight Income	5.893E+13	5.190E+13	5.225E+13	**6.221E+13**	**6.293E+13**	**7.256E+13**
Passenger	27324025	26544959	27548796	**28547556**	**28885856**	**29545765**
Passenger Income	3.886E+13	4.886E+13	4.892E+13	**5.225E+13**	**5.345E+13**	**5.325E+13**
Staff	47212	35593	32548	**33524**	**32548**	**32967**

5   RESULT AND SUGGESTIONS

The intensity of highway transportation is high compared to developed countries and EU member states. However, since infrastructure about railway and seaway in Turkey is far behind the developments in highway, highway transportation is in the foreground. It is expected that this situation would continue in short and medium term. However in long term, it is expected that studies of EU in order to decrease intense usage of highway transportation in the process of transition to combined transportation would influence Turkey as well and the intensity of highway transportation would decrease in time.

"Sustainable transportation policies" gain importance that would direct environmental-friendly developments against externalities of highway traffic such as jam, accidents, noise and air pollution. In this sense, improvement of becoming widespread of high-speed trains make railway a preferable alternative against highway and airway especially in middle distance intercity travels.

In this respect, in order to sustain its economic, social development in long-run Turkey should improve its technological skill and direct production and exportation towards manufactured product which have high added value and intense information-technology through physical and human capital investments that would renew technological basis of industry. For an industrial-based growth which has high competitive power and depends on technological development and efficiency increase; first of all development strategy, industrial and technological policies and national innovation systems are required. Direction/arrangement of these processes which require a radical transformation and creation of a suitable environment depend on forming well-functioning corporations and a developed corporation capacity (Eser, 2006, pp. 244–245).

Railway management is traditionally done by public which is in monopoly position and is continuously subsidized by public due to operating losses. Sector's inability of reaching necessary effective operation structure due to absence of competition environment and public funding allocated for the sector becoming no longer sustainable impel states to establish competition in the sector and actualize arrangements that would enable private enterprises take place in the sector (Özcan, 2006, p. 1058).

New railway era emerges with a new development line that passes through three different stages ensuing each other with easterner practices in the world. These stages are respectively

restructuring of railways such that would firstly solve structural problems in a way suitable to transportation market conditions in changing world; "commercialization and making use of flexibility and boldness of private enterprise within this competitiveness" in order to improve competition opportunities with highway transportation which is improving rapidly and about to become monopoly and privatize in order to minimize consumption of public resources (Duman, 2006, p. 1042).

As a result of increase in importance given to costumer demands, competitive element taking primacy, emergence of globalization, change in information technologies and improvement of communication opportunities, increase of environmental awareness; transportation sector shows great alteration structurally.

In the future it is expected that traffic shifts from highway to railway as a result of railway transportation sustaining its improvement and increase of awareness of public opinion for environmental issues. In order to make use of these positive improvements, railways should make amendments in service quality, comfort, reliability and price and take measures in order to increase its competitive powers.

Developing "combined transportation" which is formed with the concept that transportation systems are used together in a way that would complement their superior aspects and making connection between railway and other transportation systems, actualization of logistic centers accordingly would increase the share of railway transportation for future periods.

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Challenges of the Modern World - Contemporary Economy and Globalization

SOCIAL SECTOR DEVELOPMENT IN INDIA

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ABSTRACT

Social sector is one of the important sector in the economy because it improves quality of human life as well as help to stimulate the economic development. It is not only improve quality but also make strong, healthy and give power to produce knowledge. Social sector includes such as primary education, public health, housing, drinking water and sanitation etc. Each its own importance and are related with each other. As it is revealed that social sector has not been given due attention during planning area because it has been viewed as less profitable sector, low return as compare to physical infrastructure, which contribute directly to economic growth. The fact is that both these economic and social infrastructure are equally important for achieving balance growth. Economic infrastructure and social infrastructures are inter connected and inter dependent. India has 35 States and UTs and Indian population has 121 corer, therefore it is a huge challenge to develop social sector on ahead of Indian government. However, India has been trying to give more budgetary provision and also give priority to social sector. That is why this study focus on social sector viz primary education, primary health services, housing, drinking water and sanitation. The present paper depends upon collateral (secondary) sources which published by government of India, Private agencies, Books, Journal, Internet etc since 1960 to 2010. In this paper observed that what is present condition of social sector and actual development of social sector such as primary education, primary health services, housing, drinking water and sanitation. Moreover, this paper studied about all states and UTs statistical data which published by government of India. Moreover all of the indicators observed and at the end of concluded and give some suggestion for better development of social sector. Earlier social sector has been viewed as unproductive sector. However, in recent years, it has been recognized that it contributes to economic development directly as well as indirectly. Improvement of quality of education, skill, health, housing condition has closed linked with economic development. Therefore, government has paid more attention to develop this sector. Social sector expenditure was inadequate as compared to the size of the problem. There has been declined trend in the budgetary allocation of both the central and state governments for various sub-sectors of the social sector, especially health and education. There was wide disparities in social sector in terms of economic and social indicators in rural and urban area of India. Social sector development in India has positive trend but it is not reached at expected level.

Keywords: Development, Education, Health care, India, Indicators, Social sector

1 INTRODUCTION

Social sector is one of the important sector in the economy because it improves quality of human life as well as help to stimulate the economic development. It is not only improve quality but also make strong, healthy and give power to produce knowledge. Social sector includes such as primary education, public health, housing, drinking water and sanitation etc. Each its own importance and are related with each other.

Challenges of the Modern World - Contemporary Economy and Globalization

As it is revealed that social sector has not been given due attention during planning area because it has been viewed as less profitable sector, low return as compare to physical infrastructure, which contribute directly to economic growth. The fact is that both these economic and social infrastructure are equally important for achieving balance growth. Economic infrastructure and social infrastructures are inter connected and inter dependent. Human resources and its contribution to growth is necessary at every stage of development. It is therefore, apparent that it is the quality of the people in the terms of their health and education that constitutes the very important sub-sectors of a modern economy popularly termed as the social infrastructure. Economists, such as Marchall, Schultz and Mrydal have emphasized the role of man in the process of development. Development efforts according to them should, therefore, first be to raise in raising the quality of this man in form of his health, education, housing, water etc. Since it is this man who forms the basic engine of growth. However, this sector has captured the attention of the policy makers only recently. This occurred particularly when the policy makers often faced with the inability to attain the goals of development and were confronted with the numerous obstacles and constraints in the path of development. As a result, attention has gradually started shifting from a capital dominated investment policy to the neglected social sector. Education, health, housing, water and sanitation constitute the sub-sectors of the social sector. Thus, the development of these sub-sectors is essential for the overall development of a country.

1.1   Research Methodology

India has 35 States and UTs and Indian population has 121 corer, therefore it is a huge challenge to develop social sector on ahead of Indian government. However, India has been trying to give more budgetary provision and also give priority to social sector. That is why this study focus on social sector viz primary education, primary health services, housing, drinking water and sanitation. The present paper depends upon collateral (secondary) sources which published by government of India, Private agencies, Books, Journals, Internet etc since 1960 to 2010. In this paper observed that what is present condition of social sector and actual development of social sector such as primary education, primary health services, housing, drinking water and sanitation. Moreover, this paper studied about all states and UTs statistical data which published by government of India.

1.2   Trends in India's Social Sector Expenditure

Central government plan and non plan expenditure on social services and rural development has consistently gone up over the years . It has increased from 13.38 percent in 2006-7 to18.47 per cent in 2011-12. Which include education, sports, art and culture, medical and public health, family welfare, water supply and sanitation, housing, urban development, welfare of SCs, STs and OBCs, labour and labour welfare, social security, nutrition, and relief for natural calamities. In recent years government (central and state) expenditure on social services has shown increasing trend. It has reflecting the higher priority given to this sector. Expenditure on social services as a proportion of total expenditure increased from 21.6 per cent in 2006-7 to 24.1 per cent in 2009-10 and further to 25 per cent in 2011-12. As a proportion of the gross domestic product (GDP), its share increased from 5.57 per cent in 2006-7 to 6.76 per cent, 6.91 per cent, and 7.34 per cent in 2008-09, 2009-10, and 2010-11 respectively. India face the global crisis without much adverse impact on the social sector. In 2011-12 it is expected to be 6.74 per cent as per the BE

2   PRIMARY EDUCATION

The government has initiated many schemes for elementary and secondary education. In India Free education for all children between the ages of 6 and 14 years. India has been made a fundamental right under the Right to Education (RTE) Act 2009. While the RTE Act with effect from 1 April 2010 was issued on 16 February 2010. It mandates that every child has a right to elementary education of satisfactory and equitable quality in a formal school which satisfies certain essential norms and standards. The reform processes initiated in 2010-11 continued during the year 2011-12.

2.1   Expenditure on Education

In view to fulfill the objectives of educational programmes/ schemes government has been spending financial resources over time. Because primary education has been considered on priority basis. Hence, there has been increasing trend in making available financial resources to the educational programmes/schemes. The statistical data reveals that the education expenditure was Rs. 58.7 crores during 1961-66, which was increased to Rs. 2976.6 crores during 1980-85 and further increased to Rs. 2316.5 crores in 1990-91 in India and Rs. 11690.5 crores in 2000-01 and Rs. 31420 crores in 2008-09. In relative term, it shows that expenditure on education as percentage to total expenditure increased from 2% to 8% during 1961 to 2008-09 in planning period. While expenditure on education as a proportion of GDP has increased from 2.72 per cent in 2006-7 to 3.11 per cent in 2011-12.

2.2   Progress of Primary Education

In earlier section, it was revealed that various programmes and schemes are being implemented by government. Government has also made financial resources for primary education. Consequently, the position of primary education has improved during planned period, there were 330399 primary schools and 49663 upper primary school in India in 1961 showed 36.54% and 72.62% change respectively over 1951. Similarly, in 1981 there were 494503 primary and 118555 upper primary schools, which showed 17.32% and 23.56% change. Further there has been increased 638738 primary and 206269 upper primary schools in 2001, which was increased by 11.71% and 24.41% over 1991. It was observed that number of primary schools increased by 64.73% during 1961-2009. Thus, keeping in view increasing demand for primary as well as upper primary education, number of schools has been increased significantly during planned period.

2.3   Gross Enrolment Ratio

Enrolment ratio is most important factor at school level because it reveals children attitude toward education. It was observed that gross combined enrolment ratio was 42.6% at primary school, 60.6% for boys, 24.8% for girls in 1950-51, which increased to 62.4%, 82.6% for boys and 41.4% for girls in 1960-61. Further, it was increased 100.1%, 114% for boys and 85.5% for girls. Again, it was increased to 111.24 %, 114.42% for boys, 107.84% for girls in 2006-07. At upper primary level, it showed that 12.7% upper primary school enrolment out of these 20.6% for boys and 4.6% for girls enrolment ratio in 1950-51, which had increased to 62.1% in 1990-91 and 73.63% in 2006-07 of which 77.41% boys and 69.1% girls enrolment. At elementary level (I to VIII) the enrolment ratio increased from 32.1% in 1950- 51 to 67.5% in 1980-81 and 96.7% in 2010-11. As compared to girls, enrolment of boys remained higher as compared to girls, though it has been increased. Moreover, state wise enrolment ratio shows that enrolment ratios were higher in states such as Arunachal Pradesh, Goa, Gujarat, Himachal Pradesh, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Tamilnadu, Tripura.

Thus, it reveals the fact altogether states governments have given priority to improve the condition of primary education through implementing various programmes/schemes.

2.4   Gross Drop Out Ratio

Children's high dropout rate at schools reveals the fact that it basic literacy and numeric skills to children. In 1960-61, boys dropout rate was 61.7% and girls dropout rate was 70.9% in primary level school and in upper primary level school, boys dropout rate was 18.8% and girls dropout rate was 25.6%. In 1980-81, primary level boys and girls dropout rates were 56.2% and 62.5%. In 2004-05, dropout rate for boys was 31.8% and for girls it was 25.4% at primary schools. It also revealed that dropout rates both for boys and girls have declined over a period of time. The position at upper primary education level, dropout rate was increasing to 68% and 79.4% for boys and girls in 1980-81 respectively. Similarly, in 1990-91, dropout rate was 59.1% for boys and 66.1% for girls which had decreased to 50.3% for boys and 57.9% for girls in 2000-01. It was observed that girls dropout rate was very high than boys during 1960-61 to 2004-05. Thus, overall picture shows that though dropout rate was high however it has declining trend during 1960 to 2005

2.5   Literacy Rate

Literacy rate is considered one of the most important indicators to measure the level of human development. Literacy rate is one of the important characteristics of population. It is essential for social reconstruction, improvement in the quality of life and preparation of manpower of rapid development. A certain level of literacy is, therefore, a basic requirement for people to get out of ignorance and backwardness. Indian census of 2001 defines literate as " a person aged seven and above who can both read and write with understanding in any language.". It was observed that overall literacy rate of India was 18.33% in 1951 and which increased to 28.30% in 1961, 34.47% in 1971, 43.57% in 1981, 52.21% in 1991 and 64.84% in 2001. As per 2011 census India's literacy rate has reached at 76%.

3   HOUSING

Housing is one of the basic requirements for human survival. For a normal citizen owning a house provides significant economic and social security and status in society. For a shelter less person, a house brings about a profound social change in his existence, endowing him with an identity. Housing Scheme was also launched as part of the Community Development Movement in 1957. In 1972-73, the Estimate Committee of the Loksabha in its 37th Report had pointed out that 83% of India's population lives in villages and about 73% of the rural population reside in unsatisfactory *kutcha* structures the problem of rural housing has not receive the close attention of the Government. Following this, certain initiatives were undertaken by Government including the launching of the House sites cum construction Assistance scheme, which began as a central scheme in the 4th plan and was transferred to the state government with effect from 1974 on recommendation of the National Development Council (NDC). Government has been initiating various scheme for rural and urban area. Indira Awas Yojana is one of the most important scheme started by government of India.

3.1   Occupied Households, Residential houses and Deficit in Houses

Housing is the most important parameter to measure the social sector development. In India, there were 65.9 million households, which increased to 84.5 million in 196 and further increased to 100.4 million in 1971, 119.8 million in 1981, 152.0 million in 1991 and 193.6 million in 2001. Urban rural break up shows that there were 53.6 million rural households and 12.3 million urban residential households in 1951. While in 2001, there were 137.7 million

rural households and 55.8 million urban households with respect to shortage of houses it showed that it was 1.5 million in 1951, which increased to 5.6 million in 1961 and 5.0 million in 1991 and further increased to 6.4 million in 2001. Urban rural position showed that the shortage of houses in rural areas was 3.8 million in rural areas and 18 million in urban areas. In 2001, there were 2.6 million of shortage of houses in rural areas and 3.7 million in urban areas. Thus, it showed that India has facing problem of shortage of houses both in rural as well as urban areas.

3.2 Occupied Housing Units by Number of Rooms in India

As per 1981 census, there were 1186.14 lakh units occupying the different rooms in India. Out of the total units, 44.7% were having the houses with one room and 28.9% were having two rooms, 12.2% having three rooms, 6.3% units with four rooms and 5.8% units had five rooms. Moreover, in 1991 occupied units were 1510.32 lakh of which 40.5% units had one room, 13.6% units had two room, 7% units had three room7.2% units had four room, 7% houses had five room. Similarly, total 1919.63 lakh were occupied units in 2001. Of these, the number units in with one room were 38.5%. According to 2001 data there were 30% units as well as 14.3% units having the two and three rooms also 7.5% and 6.6% units were having four and five rooms respectively. Thus, it is fact that majority of houses had one and two rooms, not much suitable for residential purpose.

4 PUBLIC HEALTH SERVICES

4.1 Expenditure and Progress of Health in India

India incurs expenditure on various heads like establishments, which is called as establishment grant, medicines, transport, continuity, and others. The total expenditure made on these heads is but under total recurring expenditure. The expenditure incurred on equipments is put under nonrecurring expenditure. In 1961-66 the Health department of India incurred Rs. 225.9 crores expenditure on health, percentage was 2.6. Moreover in 1974-79, there were 760.8 crores expenditure on health, percentage was 1.9, which has decreased to 1.8% in 1990-91, similarly, during 2000-2001 expenditure was increased to Rs. 4055.3 crores in 2003- 2004, health department expenditure on health was Rs. 4649 crores, in 2008- 09 expenditure on health was Rs.5201 crores. Thus, it showed that five year plan expenditure on public health has increased considerably in India during 1961-2009. Moreover, expenditure on health as a proportion of GDP has increased from 1.25% in 2006-07, which has increased 1.30% in 2011-12. Therefore health expenditure has not yet reached at expected level.

4.2 Progress of Primary Health Centres, Sub Centres, Community Health Centres

India has three tier system available in rural area for rural health i.e. community health centre, primary health centre, health sub centre. Comunity Health Centre for 120000 population and Primary Health Centre for 30,000 population and one sub centre for per 5000 population are providing medial services in plain areas. Also per 80000 population one Community Health Centre and per 20000 population one primary Health Centre and per 3000 population one Health Sub Centre providing medical services in hilly and tribal area.It showed that there were 4793 primary health centres in 1957, which has increased to 5015 in 1970. There were 5293 primary health centres, 33616 sub centres in 1975, which increased to 5484 primary health centres, 47112 sub centres, and 214 community health centres in 1980. There were 9115 primary health centres, 84376 sub centres and 761 community health centres in 1985, which has increased to 18671 primary health centres, 130165 sub centres, and 1920 community health centres in 1990. Further, there has been increased primary health centres

22149, sub centres 136258 and community health centres 2633 in 1997. In 2001, there were 22842 primary health centres, 137311 sub centres and 3043 community health centres working, which has increased to 23673 primary health centre 147069 sub centre and 4535 community health centre functioning in 2010 in rural India. Thus, it shows that primary health centres, sub centres and community health centres were increased during planned period.

4.3   Life Expectancy at Birth and CDR and IMR

In India during pre-independence period the Crude Death Rate (CDR) was 47.2 per 1000 population. Male and Female Expectation of life at birth were 19.42 years and 20.91 years and Infant Mortality Rate was 174 in 1921. Further CDR was reduced to 36.3 in 1931, 31.2 in 1941. Expectation of life at birth for Male increased to 26.91 years and for female, it was increased to 26.56 years in 1931. Moreover, it was increased to 32.09 years for Male and 31.37 years for female in 1941. In 1931 IMR was 174, which reduced to 161 in 1941. During post independence period it showed that, CDR rate was 27.4 in 1951 which reduced to 22.8 in 1961, 19.0 in 1971, 15.0 in 1981, 8.9 in 2001 and 7.2 in 2010. Thus, it shows substantial progress in the reduction of CDR. In case of expectancy of life, it was 32.45 years for Male and 31.66 years for female in 1951, which increased to 50.9 years for male and 50 years for female in 1981 and further increased to 62.06 years for male and 64.2 years for female. In case of IMR, it was 146 in 1951, which reduced to 110 in 1981 and 68 in 2001 and 47 in 2010. Thus, overall analysis shows that there has been improvement with respect to CDR, life expectancy and IMR during planned period. Moreover, in view to provide medical services number of doctors also increased. It was 60.84 thousand in 1951, which increased to 153 thousands in 1971, 395.60 thousand in 1991 and 816.63 thousand in 2010.

5   DRINKING WATER AND SANITATION

5.1   Water Supply and Development

Rural and urban water supply and sanitation facilities are vital elements in the over all programme for development other related elements include infrastructural issues like land and watershed management, soil conservation, a forestation of illiteracy, women's welfare, child nutrition, immunization etc. It is desirable that the thrust and implementation of many of these programmes as possible are converged in order to provide for integrated development. Water, which is essential for life, growth and health, can also be source of spread of disease and cause of ill health, if contaminated or improperly handled and stored. Safe drinking water and improved sanitation play a major role in the overall well-being of the people, with a significant bearing on the infant mortality rate, longevity and productivity. The poor, both in rural and urban areas, bear a disproportionate burden of non-availability of water, as well as poor quality. They often supplement public sources of water with supplies obtained at high prices from other sources. Women bear the physical burden of Water. Women and children are particularly vulnerable to the effects of water contamination. Water Born Diseases 70 to 80 percent of illnesses are related to water contaminated water and poor sanitation. The national objectives of reducing mobility and mortality largely depend on the reduction of diarrhea and jaundice. In fact, no water supply and sanitation programme can be successful if water related illnesses are not reduced. It is a matter of concern the despite the progress made with water supply, the level of water related sickness continues to be right. To quote J. B. Pronk "Community water supply is basic need access to drinking water supply is a human right and it is important to stress this human right because many people don't share it".

5.2   Outlays on Rural and Urban Water Supply Programmes

India's 27.27% outlay was incurred on rural drinking schemes 72.73% on urban schemes. During subsequence periods shows that outlay on rural drinking schemes percentage to the total outlay has increased. It was 33.80% during 4th plan, 63.93% during seventh plan and 70.46% in ninth plan. Thus in order to solve drinking water problems, more attention has been given to rural areas. Thus water born and allied diseases are brought under control by establishing protected water supplies and sanitary methods of excreta disposal.

The Tenth Plan envisages provision of safe drinking water to all rural habitations. Two major programmes are being implemented to achieve this objective. These are the Accelerated Rural Water Supply Programme (ARWSP) and the Pradhan Mantri Gramodaya Yojana-Rural Drinking Water (PMGY-RDW). As reported in the last survey, with an investment of over Rs. 45,000 crores, considerable success has been achieved in meeting the drinking water needs of the rural population. There are more than 3.7 million hand pumps and 1.73 lakh piped water schemes installed in the rural areas. During 2003-04, 95 percent or rural habitations have been fully covered (FC) and 4.6 percent are partially covered (PC) and 0.4 percent are not covered (NC) with drinking water facilities.

India has initiating various drinking water scheme. Moreover, India has also various sources of drinking water such as Public/Private tap, tubewell, well, handpump, bore etc. Out of these sources 38.2% were tap/tubewell/handpump available in 1981,of this 26.5% and 75.1% were rural and urban sources available in India respectively. Moreover, in 1991, rural and urban sources were 55.5% and 81.4% respectively and total sources were 62.3% (tap/tubewell/handpump). Which had increase to total 81.4%(tap/tubewell/handpump) in 2001, of which 77.9% were rural sources and 73.2% were urban sources in India. An investment of about Rs. 72600 crores has been made (under both State and Central Plans) from the beginning of the planned area of development in rural water supply sector. As per available information, this investment has helped to create assets of over 41.55 lakh hand pumps, around 15.77 lakh public stand posts, around 1.60 lakh mini-piped water supply schemes, and 45000 multivolume schemes in the country under the Rural Water Supply Programme. Of these systems, 88.21% hand pumps, 93.49% stand posts, 91.95% mini schemes, and 96.26% multi village schemes were reported functional by the States. During the Tenth Plan , the approved outlay for the programme was Rs. 13245 crores. The programme was well funded during the Tenth Plan (being a part of Bharat Nirman programme) and by the end of March 2007, an amount of Rs. 16,103 corers was released to the States under the scheme. On the physical achievement side, 352992 habitations have been reported covered by the States during Tenth Plan.

6   SANITATION

Sanitation is to be seen as a basic need, as basic as drinking water or food. A sanitary toilet, within or near home, provides privacy and dignity to women. Mahatma Gandhi emphasized the link between sanitation and health as key goal for our society. Sanitation coverage, which ought to be a way of life to safeguard health, is inadequate in our country. In fact, problems like open defecation continue to remain for the majority of the population in rural areas. The practice of open defecation in India is due to a combination of factors the most prominent of them being the traditional behavioral pattern and lack of awareness of the people about the associated health hazards. The Cultural Rural Sanitation Programme (CRSP) was launched in 1986. It was restructured in 1999 after which Total Sanitation Campaign (TSC) was introduced. The TSC envisages a synergized interaction between govt, people, NGOs. Tenth

Plan strategy envisages a shift from allocation based programme to a demand based project mode with greater household involvement, intensive of IEC campaign and emphasis on School Sanitation. Under TSC programme, 578 districts from 30 states have been covered. Provision of proper sanitation system in rural areas would contributes to personal hygiene and overall health. The problem has not yet been receiving the required attention in rural areas, the reason being that most of the villagers like to go to the open areas for defecation. For rural sanitation, low costs sanitation systems should be adopted. It is observed that the soak well system is very commonly used in most of the rural areas. Many agencies have attempted to use vernacular disposal systems such as *ulta mataka*, empty tar drums and other coastal areas, a two-pit latrine system based on United Nations Development Programme (UNDP) design is becoming more and more popular and acceptable because of low cost, less consumption of flushing water, no maintenance, availability of good manure and its acceptability by the people. In addition prefabricated Ferro cement tanks, either of cylindrical of rectangular shapes, are also available which can be used in rural areas with economy as septic tanks.

7   CONCLUSION

1. Earlier social sector has been viewed as unproductive sector. However, in recent years, it has been recognized that it contributes to economic development directly as well as indirectly. Improvement of quality of social sector has closed linked with economic development. Therefore, government has paid more attention to develop this sector. Social sector development in India has positive trend but it is not reached at expected level.

2. Position of education, particularly primary education is not good enough against the backdrop of sharp differences across states and persistence of large male, female and rural-urban disparities. There has been improvement in literacy rate during 1961 - 2011 in India. However, it is not at desirable level. Moreover, female belonging to backward communities are lagging in this regard.

3. Enrolment in primary school has increased during planned period which show the success of education schemes beings implemented by government. However, Enrolment rates of boys and girls in rural areas have not increased at expected level in rural areas. As compared to enrolment rate of boys, enrolment rate of girls remained low.

4. Moreover, India, drop out rate was declining period during 1960 to 2005, however, it was achieved as per expected, drop out of girls was high than boys drop out rate in India.

5. In view to meet increasing demand for primary education in rural and urban areas, number of schools has increased in India However, there has been shortage of primary schools in backward and mountainously area.

6. Shortage of housing in the country is serious problem and has been increasing year to year due to increasing population in rural and urban areas Housing problem has been remained serious issue in rural as well as in urban areas especially for all economically weak and socially backward communities.

7. Government of India has taken various direct initiatives to provide shelter by launching number of schemes like Indira Aawas Yojana, which has been implementing at wider scale in India. In fact, this scheme has made substantial progress in providing houses to BPL families. Yet desirable success has not been achieved.

8. More importantly, houses provided under this scheme are small in size, not much suitable for residential purpose as per family need because financial resources are limited.

9. Under nutrition and malnutrition coupled with high morbidity are serious problem, which affect adversely the quality of health in spite of the fact that health expenditure has

increased during planning period in India .The intensity of this problem has increased due to continuous increasing population, though there has been dealing trend in birth rate.

10. There has been improvement in life expectancy in India. It was caused to improvement and progress of health facilities in rural area and urban areas. In India communicable diseases such as polio, tuberculosis, malaria are under controlled of larger extent. Moreover, treatment for diseases like as heart, diabetics, cancer has been improved. Still there is serious problem with respect to AIDS diseases for which effective medical treatment not developed. Thus, India has achieved success in health sector, yet not attempts to will have to paid on health sector particularly in rural areas with respect to childcare, pregnancy and improvement in health services to be provided to BPL families.

11. It was observed that Primary Health Centres, Sub Centres, Community Health Centres were increased during planning period. In order to achieve objectives set under National Health Mission, health expenditure has to increased. Consequently, there has been improvement in public health facilities. However, these facilities were not adequate to meet increasing demand for medical facilities. Moreover, there has been gap between the actual availability of Medical facilities and their utilization due to lack of awareness among pourers in rural areas.

12. At present, the drinking water supply is made available to 86.74% of the rural population and 85% of urban population of India. However, these facilities were not adequate. In fact, during summer season this problem becomes more serious. Moreover, create additional burden on women in rural areas in getting drinking water far away from village.

13. Moreover, there has irregularity in supplying drinking water through public schemes due to load shading of electricity. In fact, irregularity and uncertainty in electricity supply has affected adversely the proper functioning of government schemes.

14. 70 to 80% of illnesses are related to water contaminating and poor sanitation use of chemical fertilizers, chemicals, poor hygienic environment of water sources, sewage and solid waste in India has made water more polluted, which in turn resulted in water born diseases.

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REFLECTION OF POVERTY AND SOCIAL EXCLUSION IN THE CHANGED SOCIOECONOMICS CONDITIONS IN THE SLOVAK REPUBLIC

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ABSTRACT
There is the poverty and the social exclusion problem in the centre of interest of the social policy and research in the EU countries and beyond. New social risks associated with the labor markets unstable development, the family institution conversion and destabilization, the growing migration, as well as with the social state role restriction, led to the poverty and the social exclusion levels deepening in the EU economically developed market countries, too. In the strategic document Europe 2020 one of the targets is oriented to poverty and social exclusion. The aim is decreasing the number of people living in the risk of poverty or social exclusion about 20 000 000. The Slovak Republic is obligated to reduce the number of people living in the risk of poverty or social exclusion by 170 000. According statistical finding EU SILC 2011 the poverty rate increased about 1 percentage point (13 %) compared previous survey. The paper deals with the poverty and the social exclusion phenomenon in the Slovak Republic and measuring approaches to these categories. The statistical finding EU SILC is the harmonic detection main tool in the field of the poverty and the social exclusion in the EU. The author mentions the importance of the national indicators, what reflect the country specificities after the realized analysis of the social indicators of the poverty and the social exclusion. Besides the poverty main income indicators should be received further indicators, what allow to take into account the multidimension of the poverty and the social exclusion problem. In the paper there are suggested the ideas for the poverty and the social exclusion reduction. The solution is in macroeconimic development, in the citizen activation, the education, as well as in the enterprises and individuals social responsibility.

Keywords: EU SILC, Poverty, Poverty rate, Social exclusion, Social inclusion

1 INTRODUCTION

Despite differences in the specific historical experiences, the Member States of the European Union are based on certain common values: freedom, democracy, social justice, respect for human rights and dignity, equality, solidarity and social dialogue. Considering these values, the EU has set the objective to adopt decisive measures to reduce poverty, already at the beginning of the implementation of the document Europe 2020. Nevertheless, the poverty (relative) is present in all Member States and represents very diverse phenomenon having risk factors unequally distributed within the society. However, at the present, it is not only the lack of adequate income in the centre of attention, but mainly processes and mechanisms of social exclusion. In the following sections we will focus on approaches to measure poverty and social exclusion in the Slovak Republic and possible measures to poverty reduction. The paper is a part of the research project VEGA 1/0330/11 Social inequalities and their regional dimension in the Slovak Republic.

2   APPROACHES TO POVERTY MEASUREMENT IN SLOVAKIA

There is no legislative definition of the term poverty in the Slovak society and official statistics did not show the number of poor people until the accession of Slovakia into European Union as it is for instance reported in the European Union by Eurostat. There were more synonyms for the poverty used in Slovakia, such as underprivileged people, socially dependents, low-income households and especially the concept of material need meaning actually the poverty. Therefore, the next section describes the social dependence of citizens and help for people in material need.

The social dependence has been legalized for the first time in our legislation in 1991 by adoption of a Decree on the Social Dependence. This has defined socially dependent citizen as a citizen with an income of less than the sum of amounts required to provide food and other basic personal needs without possibility to increase this income by employment because of his age, health status or other serious reasons. Subsequently, the Act on a Subsistence Minimum has been adopted specifying the subsistence minimum as "socially recognized minimum level of the income of a citizen, which when failed to be reached leads to the status of a material need". Hence, the material need means the status, when the income of a citizen does not reach the level of a subsistence minimum set by a special regulation. This definition was too narrow (financial poverty) to cover all dimensions of poverty.

A new Act No. 125/1998 on the subsistence minimum and on the specification of amounts for the purpose of social benefits was adopted in 1998. This was based on a civil principle emphasizing the responsibility of a citizen for his unfavourable life situation. In terms of current practice in Slovakia it represents socially accepted limit of net cash income that should provide a household with temporarily coverage of its needs on very low level. These include expenditures for routine needs, such as nutrition, basic personal needs, spending on household operation allowing the reproduction of basic needs and minimum social contacts. Thus formulated concept of a subsistence minimum assumes that it is possible to live only temporarily in this conditions and that there is a real possibility to improve the material status of a citizen by his own activity. The subsistence minimum served as the basis for the calculation of social benefits. The Subsistence Minimum Act and subsequently adopted Act No. 195/1998 on Social Assistance as amended specifying the application of the above mentioned act has determined three levels of subsistence minimum and hence also the differentiation of social benefits. The criterion for classification was the fact, whether the unfavourable situation of the citizen was caused by him for objective or subjective reasons.

a.) A citizen being in a material need for objective reasons and having no income from the employment was given the social benefit complementing his income to the value of subsistence minimum.

b.) Another level of a subsistence minimum was a social minimum belonging to citizen in material need for objective reasons and having income from an employment. Such citizen was given the social benefit complementing his income to the level of 120 % of a subsistence minimum.

c.) The lowest level of the subsistence minimum was represented by the existence minimum granted to the citizen in material need for subjective reasons. The social benefit complemented his income to the level of 50% of a subsistence minimum. Existence minimum was to provide for basic living conditions, namely one hot meal per day, necessary clothing and housing.

However, this structure did not consider sufficiently high rate of unemployment on one hand and a low job creation on the other.

The amendment of the Social Assistance Act in 2000 changed the setting of the social benefit for objective reasons. The social assistance benefit was determined firmly in the amount complementing the income to the specified level. Gradual disconnecting of social benefits from the subsistence minimum concept was caused by increasing number of beneficiaries, hence creating pressure on the state budget. There were significant changes carried out in the system of social assistance.

The Act No. 599/2003 on Assistance in Material Need from 2003 replaced the Social Assistance Act of 1998 in the area of financial support for poor. One of the objectives of the Act was to facilitate and introduce the transparency into provisioning of social benefits: the Act removed the differentiation of subjective and objective need; however the amount of benefits in material need was decreased and the entitlement to receive them was redefined and became stricter. The benefit in material need has been set in 6 levels depending on the type of the family and guarantees the citizen in material need basic living conditions (1 hot meal per day, necessary clothing and housing).

Table 1: Benefit in material need in EUR/2012
(Ministry of Labour, Family and Social Affairs of SR)

Household type	Benefit
Single, no child	60,50
Single, 1-4 children	115,10
Couple, no child	105,20
Couple, 1-4 children	157,60
Single, 5+ children	168,20
Cuople, 5+ children	212,30

At the same time, a range of benefits supplementing the material need benefit were introduced (activation allowance, protection allowance, housing allowance, health care allowance). These supplemental benefits are subject to fulfilling certain conditions.

Table 2: Benefit in material need and its allowances for individual in EUR/2012
(Ministry of Labour, Family and Social Affairs of SR)

Year	Life minimum	Benefit in material need	Activation allowance	Protection allowance	Housing allowance	Allowance for health care
2012	194,58	60,50	63,07	63,07	55,80	2

Further, there were introduced subsidies for families for food and school kits to support education for children coming from socially disadvantaged environment. However, in this system there is no clearly defined limit of minimum entitled income proven to cover without doubt clearly defined basic needs of individuals and families. This problem is closely related to definition of a subsistence minimum or the limit of poverty.

Table 3: Comparison of benefit in material need according household type and life minimum (2012)

No. of adults	No. of dependent children	Benefit in material need (BMN)	HCA	HA	AA, PA	Total	Life minimum (LM)	BMN+ allowances / LM (%)
1	0	60,50	2	55,80	63,07	181,37	194,58	93,21
1	1	115,10	4	89,20	63,07	271,37	283,40	95,75
1	2	115,10	6	89,20	63,07	273,37	372,22	73,44
1	3	115,10	8	89,20	63,07	275,37	461,04	59,73
1	4	115,10	10	89,20	63,07	277,37	549,86	50,44
1	5	168,20	12	89,20	63,07	332,47	638,68	52,06
2	0	105,20	4	89,20	126,14	324,54	330,32	98,25
2	1	157,60	6	89,20	126,14	378,94	419,14	90,41
2	2	157,60	8	89,20	126,14	380,94	507,96	74,99
2	3	157,60	10	89,20	126,14	382,94	596,78	64,17
2	4	157,60	12	89,20	126,14	384,94	685,60	56,15
2	5	201,16	14	89,20	126,14	430,5	774,42	55,59

Note: HCA – health care allowance, HA – housing allowance, PA – protection allowance, AA – activation allowance

The result of this reform is that income of most households (especially families with more children) being in the material need situation does not reach legally set subsistence minimum level. The subsistence minimum thus fails to fulfil it's primarily function of securing temporal protection from material need and beneficiaries are withdrawn the basic right – the right to live in dignity. The social policy in this case fails to efficiently solve life situations occurred.

2.1 The Statistical Survey of EU SILC Project

Changed international and political context in Europe has brought also new challenges in the measurement of poverty for Slovakia. Accession of Slovakia to the EU started the usage of common EU indicators within open method of coordination to measure poverty and social exclusion calculated on the basis of common criteria that are part of statistical surveys of EU SILC. The project of EU SILC is tracking especially income poverty, but notices also the aspect of material deprivation and social exclusion in relation to education, health, working conditions, social participation, etc.

The main criterion used in order to examine the income poverty within the EU SILC is the rate of the risk of poverty defined as the share of persons with equivalent disposable income bellow 60% of the median value of equivalent income. The results of surveys of incomes and living conditions in Slovakia showed that there were 13% of the population in the risk of poverty in 2010. At risk are primarily low-income families characterized by the following attributes: social status, number of economically active persons, age and education of the breadwinner, as well as the size of the municipality and the region where families live. In 2010, the limit of the risk of poverty was set to 315.33 EUR per month for individual person, which is more than in previous years of statistical surveys (year 2009 – 305.83 EUR, year

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2008 – 283.55 EUR). The limit of the risk reflects the level of achieved disposable income in particular regions because it is the highest in the region of Prešov, Banská Bystrica and Nitra.

Table 4: At risk of poverty – 60 % median (%, EUSILC)

NUTS 3	EU SILC 2005	EU SILC 2006	EU SILC 2007	EU SILC 2008	EU SILC 2009	EU SILC 2010	EU SILC 2011
Slovak Repubic	13,3	11,6	10,5	10,9	11	12	13
Bratislavsky	7,8	7,3	5,9	6,9	6,5	5,1	7,2
Trnavsky	10,9	8,4	8	6,9	8	6,7	9,5
Trenčiansky	13	10,7	7	9,9	8,6	10,1	9,2
Nitriansky	16	11,8	12,2	12,9	12,9	13,2	14,8
Žilinský	12	11	8,5	10,3	9	9,6	11,0
Banskobystrický	10	13,3	12,6	13,5	13,6	16,9	15,3
Prešovský	21,3	15,7	15,6	13,6	16,3	18,7	20,2
Košický	13	13	11,9	11,2	10,9	12,7	13,5

The seventh year of carrying out the EU SILC project permits, inter alia, also to create a time series for trend evaluation.Comparing to previous years, the share of persons threatened by the risk of poverty tents to grow in Slovakia slightly since 2009 when gradually seeing impacts of global crisis. The limit of the risk of poverty in tracked period reached the lowest values in 2008. The limit of poverty below the national average was reached in the regions of Bratislava, Trnava, Trenčín and Žilina. In other regions, the level of poverty exceeds the national average.

This was reflected also in the development of other poverty indicators. There were no major differences indentified between sexes. Children and young people are under the highest risk of poverty in Slovakia, when the poverty rate in this age category reached the value of 21.2% in 2010 and grew by 2.3 percentage points comparing to 2004. Child poverty is caused by living in jobless households or with parents having insufficient coverage by jobs or poor paid jobs and family income insufficient to avert the risk of poverty. Little motivating environment in which children grow predisposes them very likely to life in poverty as adults.

At the least risk of poverty are persons in pre-retirement age (50–64). Detected rates have grown for all age categories during last three years of statistical surveys except of the oldest age group with noted slight decrease of the risk of poverty.

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Table 5: At risk of poverty by age (%, EUSILC)

		EU SILC 2005	EU SILC 2006	EU SILC 2007	EU SILC 2008	EU SILC 2009	EU SILC 2010	EU SILC 2011
Spolu	**Spolu**	13,3	11,6	10,5	10,9	11,0	12,0	13,00
	Muži	13,2	11,8	9,8	10,1	10,1	11,7	12,8
	Ženy	13,5	11,5	11,1	11,5	11,8	12,2	13,1
0-17	**Spolu**	18,9	17,1	17,2	16,7	16,8	18,8	21,2
18-24	**Spolu**	15,6	12,5	11,6	11,9	13,3	14,7	15,0
25-49	**Spolu**	14,1	11,6	9,8	9,9	9,6	11,4	11,8
50-64	**Spolu**	8,3	7,7	7,0	7,5	7,3	8,7	8,4
65+	**Spolu**	7,1	8,5	8,3	9,9	10,8	7,7	6,3

Another factor increasing the risk of poverty is the economic activity. According to the basic types of the economic activity (workers, unemployed, pensioners and other inactive persons), the unemployed were the most at risk of poverty in 2010, when nearly half of them (42.6 %) lived below the poverty level. Unemployment in Slovakia belongs to the most critical determinants of poverty. Long term unemployed, low educated applicants or applicants with education not corresponding to labour market demands are the most exposed to the risk of poverty within the group of unemployed. The least exposed to the risk of poverty are employed persons. Thus, work is the mean to avoid the poverty, although not always it is the guarantee of adequate income (poor workers). Similarly, inactive persons do have also relatively high risk of poverty.
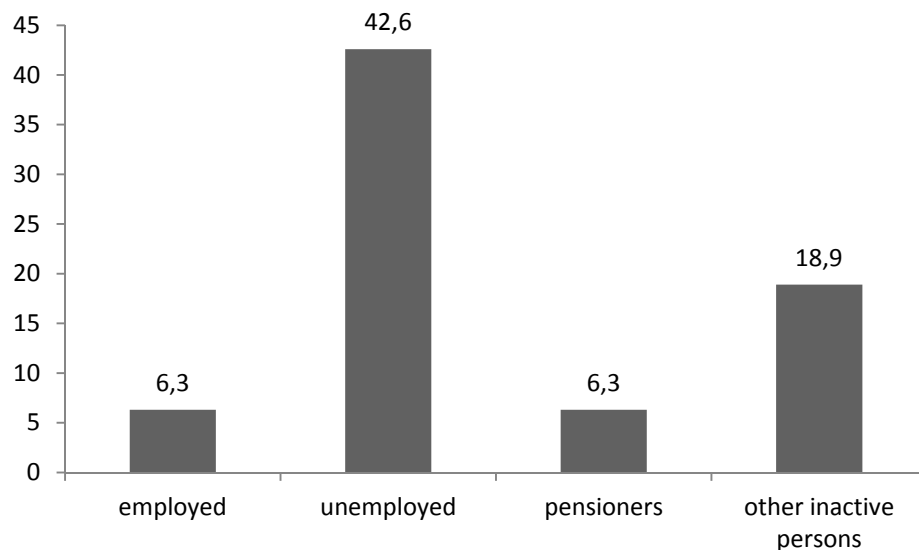
Chart 1: At risk of poverty by economic status (%, EUSILC 2011)

The type of a household is another important indicator of poverty. Rate of the risk of poverty depending on the type of a household shows the need to pay increased attention to incomplete families. The most threatened by the risk of poverty are households of one parent with at least one child (this was 26.4% of households in 2010). They are twice times more jeopardized by the risk than families with both parents. The cause of the risky situation of this group is especially the absence of the second income in the family. The breadwinner is usually women

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having in most cases lower income than a man. Due to the care of children and household, there is no time left for women to increase its own qualification, hence she has lower assumptions for the qualification growth. In full families the risk of poverty grows with the number of children.

Table 6: At risk of poverty by household type (%, EUSILC)

Type of household	EU SILC 2005	EU SILC 2006	EU SILC 2007	EU SILC 2008	EU SILC 2009	EU SILC 2010	EU SILC 2011
Single	17,3	16,9	17,3	21,7	23	19,1	...
Couple without children	8,1	7,9	6,5	7,5	7,7	8,1	7,9
Single, 1+ dependent children	31,8	29,4	25,9	20,9	23	25	26,4
Couple, 1 dependent child	12,9	8,0	5,9	9,6	10,5	12	13,2
Couple, 2 dependent children	16,7	13,6	12,3	10,0	9,9	11	13,1
Couple, 3+ dependent children	24,2	23,9	25,7	33,3	27,9	29,8	32,6

In relation to the objective - reduction of poverty and social exclusion in EU Member States, there was an aggregated poverty and social exclusion indicator adopted within the strategic document Europe 2020. It is based on three attributes: the poverty risk rate, sever material deprivation and the percentage of people living in households with very low labour intensity. This perspective is considering geographical aspect and forms of exclusion not necessarily related to the income. Geographical aspect is particularly important as the "poorest people" often concentrate in certain regions. We have analysed the poverty risk rate in the previous chapter, so we will focus on remaining two indicators. By a server material deprivation are threatened people not being in the position to afford at least 4 of the following 9 items (EC: The social impact of the ecnomic crisis and ongoing fiscal consolidation. Luxembourg, 2012. pp. 52): 1. pay the rent, mortgage or bills, 2. keep home adequately heated, 3. face unexpected expenses, 4. eat meat, fish and equivalent proteins every second day, 5. one week holiday away from home, 6. own a car, 7. have a washing machine, 8. own a colour TV or 9. a phone. The last aspect of aggregated poverty and social exclusion indicator is the rate of low labour intensity (portion of people in the age of 0-59 living in households with very low labour intensity – it means with adults employing their working potential to the extent of less than 20% in recent years).

At the end of this document we put aggregated poverty and social exclusion indicator considering three above mentioned aspects. Households taken into account in multiple sub-indicators are counted only once.

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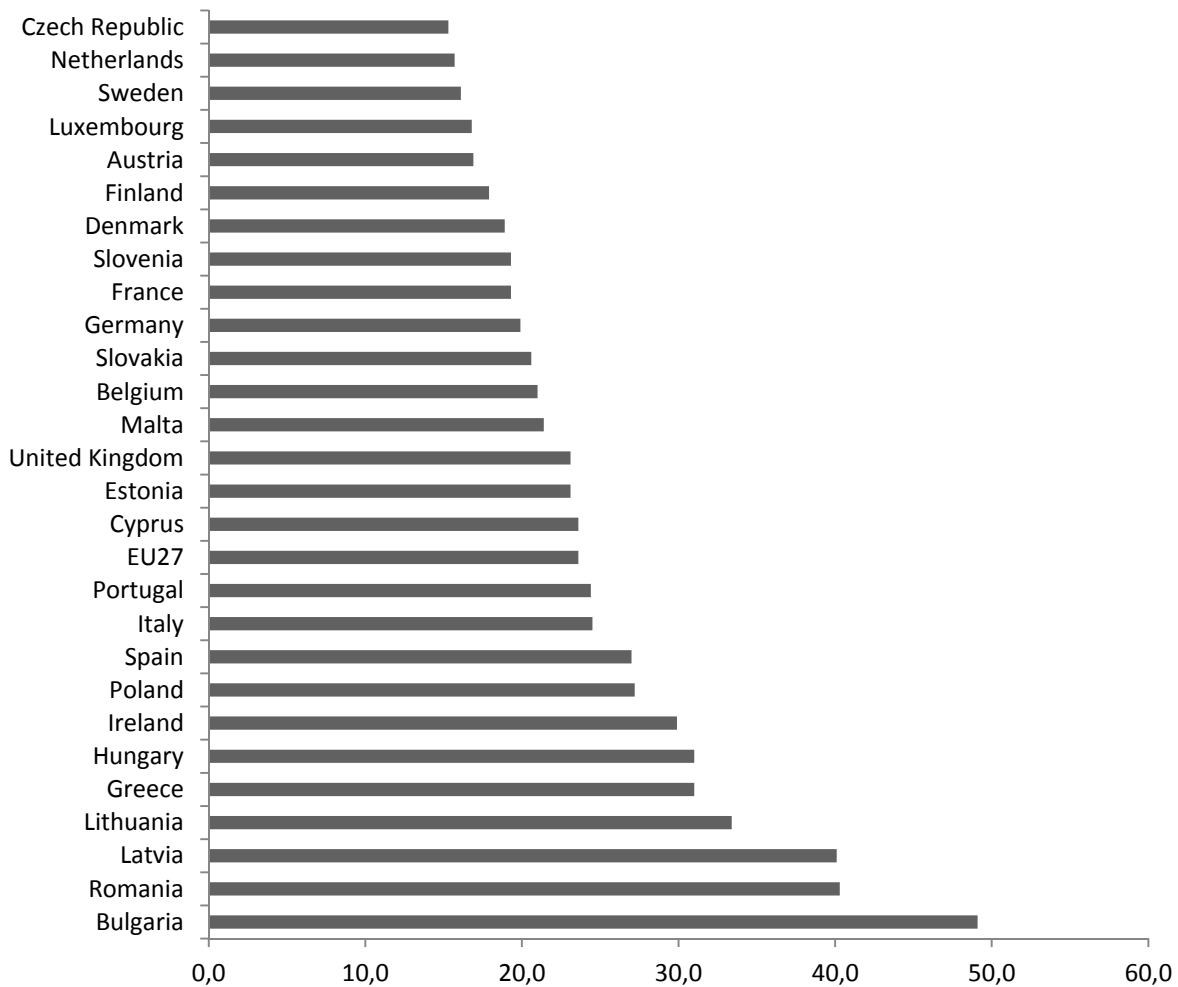
Chart 2: People at risk of poverty or social exclusion (%, 2011, Eurostat)

In terms of future development and trends in poverty and social exclusion it is important to continue in statistical surveys of the EU SILC project in order to obtain longer time series giving more representative results as it is now. National indicators of poverty and social exclusion defined in the national project approved by the European Commission can help in solving poverty and social exclusion. So called tertiary indicators examine poverty and social exclusion not only at the regional level, but also on the level of district, inter-settlement or community level and they are considering also ethnical aspect and time span of remaining in poverty. Although having defined the national indicators already several years ago, there was no actual data collection performed.

3   CONCLUSION

The issue of poverty and social exclusion persists in the society as an extreme manifestation of social differentiation of society on the basis of material, ethical and cultural differences or differences in lifestyle. It is necessary to come to realize that this is a complex issue requiring cooperation of number of involved subjects (Offices of Labour, Social Affairs and Family, local governments, NGOs, private citizens) and as such cannot be solved only by redistribution and in many cases does have a multi-generational span. Therefore, it is desirable to apply a new approach seeking for social inclusion of the youngest generation of

people coming from marginalized areas, as the poverty and social exclusion is not the failure of the society only but of the individual as well.

The analysis of selected indicators of poverty and social exclusion in Slovakia has shown a complex and yet individual approach to solving questions of social inclusion. The core of the approach is: inclusion into a labour market, availability and quality of housing, accessibility to education, access to health care and adequate income support.

Inclusion into the labour market is considered to be the key aspect of the social inclusion as the prevention against poverty and this also when taking into account the retirement because pension benefits are derived from labour incomes. Moreover, the participation of a citizen in the labour market supports his participation in social life of the society and his personal development. Exclusion from the labour market has different impacts in different types of households. It differently affects the family where the only breadwinner has lost a job and differently in a family with more economically active members with income. Regarding the exclusion on the labour market a high rate of unemployment and high share of long-term unemployed people is characteristic for Slovakia.

The situation of unemployed and their households is to a large extent influenced by the social protection system protecting these citizens from direct impacts of the loss of an income when loosing a job. Unemployment benefit is provided in the amount of 50 % of a daily assessment base for the period of 6 months. Problem generated in our system of social insurance is that a citizen is obtaining the entitlement for this support again only after paying the insurance for another two years. In the actual global crisis it is requested to reconsider the period of the support in the case of the unemployment benefit in relation to reduction of vacancies and increase of spending from the social assistance subsystem. We propose to differentiate the period of support according to the age of the applicant and the time of contributing into the unemployment insurance funds.

Provision of the benefits in the status of material need is subject to the utilization of the unemployment benefit at the first and is understood as the last component of the social rescue network.

Taken legislative amendments have affected the beneficiaries and the public spending as well. Changing the system resulted in decrease of number of the beneficiaries of the material need benefit by more than 420,000 people. We continue to observe regional differences in number the beneficiaries of the benefit in material need, which is mostly influenced by the situation on the labour market – there is a strong correlation between the number of material need beneficiaries and the level of regional unemployment in Slovakia. The largest portion of the beneficiaries is formed by households of individuals (62 %). Allowances implemented to complement the benefit in material need aimed to increase the basic benefit and to implement the effect of activation and motivation to the system in many case failed to meet its purpose. The activation allowance is granted approximately to 67% of citizens in material need, but only in the period of seasonal works or in the case of increasing the qualification, hence not guaranteeing the stability of the income for a citizen. Constant reviewing of the entitlements for the benefits in material need and its allowances makes the system costly in terms of its administration. Nevertheless, we can say that the social assistance system reduces poverty and contributes to its solution. Changing the system resulted in the fact that many families with several children do not reach legally set limit of the subsistence minimum and thus are not

able to satisfy its basic needs. The system of help does not solve an adverse life situation of families in these cases and therefore we propose to reassess again the significance of subsistence minimum as a basic category for ensuring human dignity.

Considering the fact that some people stay in the system of material need for a long time we can conclude that the system itself can form the barrier to possibilities of legal increasing of the income by own activity. It is therefore necessary to look for tools leading to higher involvement of municipal authorities to the area of benefits in material need including budget coverage of increased spending, because municipalities have the best information on the status of beneficiaries, their needs and possible solutions.

Active labour market policy with its focus on education, training, targeted activation of various endangered groups contributes significantly to the fight against poverty and social exclusion. At present, however, we can talk about the paradox: if all capable people are to be socially integrated especially through employment and thus contribute to economic growth, there is a need for more and better jobs, systems and supporting programs and not less as we can see in nowadays changed conditions.

Quality jobs and secure employment is closely related to good and broad education. Slovakia and Member States shall therefore develop combination of suitable measures targeted to coordinate better skills and qualification on one hand and the requirements of companies on the other hand. It is necessary to ensure higher employment rates for graduates and to improve framework conditions for companies in order to create quality jobs.

The issue of the social exclusion of the same importance is the area of housing. Socially excluded people are concentrated in particular areas with several attributes of social exclusion even in its extreme forms with all social and pathological phenomenon and with full load of multiple deprivation of people from these areas. People at risk of social exclusion are often forced to live in low-quality housings, but in many cases costly for them. Due to segregation of these areas there are limited opportunities for investments into the future for inhabitants of these sites. One of the results is especially difficult and even blocked access of children from these areas to full and quality education. This can be result not only of their intentional discrimination, but also consequence of factors, such as low personnel and material equipment of schools in the site of concentrated socially excluded people. But we can not forget that problems with education of these children are not only a matter of lower intellect and limited capabilities but also a matter of cultural differences and the absence of support from their families.

To reduce significantly the poverty and social exclusion, efforts of public administration bodies at all levels shall be supported by social partners, civil society organizations and individuals. One of the ways to fight against the poverty and social exclusion should be the support of expansion of social economy entities giving care to citizens in a need of it and providing employment to citizens who cannot easily find a regular job.

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ROLE OF NON-GOVERNMENTAL ORGANIZATIONS ON RURAL AREAS IN POLAND

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ABSTRACT
The idea of the civil society is characterized historically in the past and currently in modern times by on the one hand participation in civil organizations, and on the other hand the extent and form of social self-organization. Therefore, due to the fact that nowadays a more common occurrence is a tendency to express civil society in terms of non-governmental organizations. This article concentrates upon civil society in rural areas of Poland through the prism of NGOs. Therefore the aim of this paper is to describe the process of shaping the civil society in Poland's rural areas.

Keywords: Civil society, Local development, Non-governmental organizations

> *Civil society is the social order towards which all modern democratic societies are gradually working.*
>
> Vaclav Havel

1   INTRODUCTION

There is no doubt that Polish rural society is characterized by significant departures from the basic patterns of civil society. Nowadays all the countries (not only Poland) are facing challenges from the forces of change driven by the globalization. This changing situation causes greater stress upon the a growing significant role of non-governmental organizations, because they are expected to play a key role in terms of development. Furthermore domestic crisis of the European Union (affected by world economic crisis) has a huge impact on civil society. However the crisis is still very much a worrying subject and its effects are keenly felt. This is reflected, inter alia, into the needs of finding a new model of development in rural areas, which can be based on NGOs actions since the current one creates exclusion.

2   ESENTIAL JUSTIFICATION

The term "civil society" is capacious and supporting structure, is only a theoretical construct that is not reflected in reality (only some of its designates could be tested in an empirical way like condition of non-governmental organizations). In other words, civil society is a term ambiguously interpreted and scientifically imprecise. Today *it is one of the most popular ideas of social theory and certainly one of the most popular political slogans (...). The concept of civil society remains primarily a contemporary vision of utopia, a useful but also mysterious catchword* (Herbst, 2005, pp. 9–11). Therefore, because the idea of civil society evolves through time and now the main characteristic of a modern civil society (including the countryside) is on the one hand participation in civil organizations, on the other hand the extent and form of social self-organization, and due to the fact that nowadays a tendency to express civil society more often in terms of outside political activities or activities undertaken outside state institution, in this article civil society is considered as a set of non-governmental organizations.

Further deliberations were used such as sociological/community concepts of civil society, upon which characteristics of the third sector in rural areas in Poland was made. The choice of this tradition is supported by the fact that today there are increasing numbers of NGOs working for environment, community welfare and its inhabitants.

3   RESEARCH INFORMATION

Because in today's world the pursuit of development can take place not only in public institutions but also can be delivered by non-governmental organizations. Therefore this article reflects mostly on the results of research which was oriented on civil society in rural areas in Poland. The research was conducted by the Rural Polish Forum and Nicolaus Copernicus University within the project: "Good Start – support and information centre for non-governmental organization in rural areas" and was based on quantitative methods (surveys) which were performed providing depth to the information gleaned from a large representative sample of survey respondents (together, using CATI, 376 non-governmental organizations took part)[1]. The sample is representative of the non-governmental organizations in rural areas of Poland and so allows for generalization. Qualitative research will be conducted in March 2013 in order to complement the survey work.

The main objectives of the project/research were to develop a methodology for supporting the activity on the rural areas and developing mechanisms to support non-governmental organizations.

Also, it has to be mentioned that this research was financed with funds from Human Capital Programme and was a response to a real problem for the development of civil society in rural areas in Poland, which results from the weakening of the capacity of rural residents in the area of identifying and shaping their own individual lifestyle, needs and develop their own value systems and to influence decisions concerning their local environment by acting in non-governmental organizations.

4   ROLE OF THE NGOs ON RURAL AREAS IN POLAND

In Poland the 3rd sector underwent deep transformation over the past 20 years. NGOs became truly effective in mid 1989, when civil society started to develop at a very fast pace. But the most dynamic moment of its development falls into the year 2000, so almost 10 years after the political system transformation, when according to the National Court Register there were registered 6000 associations and 400 foundations (Przewłocka, 2011, p. 7). Since then, every year across the country have been nearly 4000 new associations and 1000 foundations registered (Herbst, 2010, p. 10).

Currently there are over 100 000 registered organizations in Poland but in this place we have to face with a worrying phenomenon which is noticeable increase in the number of inactive organizations (25% of all NGOs are so called "dead souls", in other sectors there is the concept of 'churn' (e.g. new subscribers to satellite television but older customers drop off)) (Przewłocka, 2011, p. 7). Non-governmental organizations in rural areas that have been tested are relatively young, two thirds of them have been created within the past 10 years – look at diagram no 1. This situation has its justification in the accession to the European Union in May 2004, as the accession has been created artificially. The main goal of many of this

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[1] More information about research and sample could be fund on following website: www.//ds.org.pl/o-projekcie.

organizations was to apply for funding from various EU programs. Many foundations and associations were established only for the implementation of specific projects.
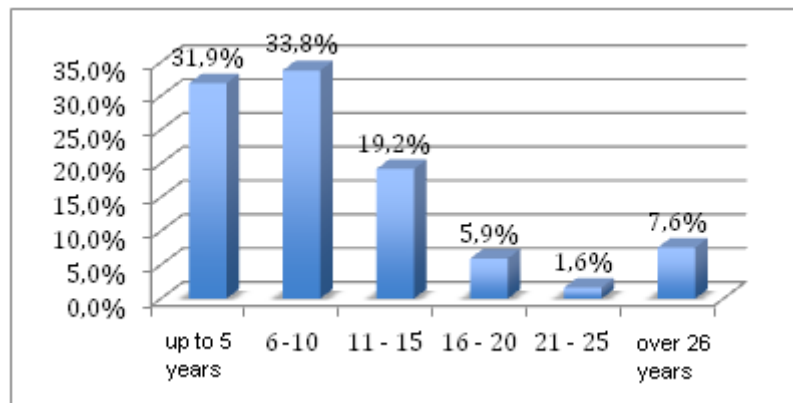
Chart 1: Age of NGOs on rural areas in Poland (Own analysis)

Reading the report *Basic facts about non-governmental organizations*, we find that in Poland we have a large number of associations involved in sport, tourism or simply single hobbies. We also have organizations involved in arts and culture, education and upbringing (Herbst, 2011, p. 29). This is reflected in the activity profile of the rural organizations. Most of them - 24% - deal with local development, which is a kind of novum, many groups of organizations are connected with social welfare (17,9%), education (13,6%) or sport and tourism (10,7%).

A general overview of non-governmental organizations shows, that the third sector in Poland is not very strong, because almost ¾ of Polish is not involved in the actions taken by civil organizations, and only 1 in 7 declare activity in one area – which is usually education. Moreover, last year, only 1 in 5 Poles partook in a voluntary unpaid work for their local community (CBOS).

The national data also shows that the overall condition of civil society is not the best what is directly connected to low level of civic engagement of Poles, which follows from different kind of historical burdens from the one hand and widely shared believe in the lack of influence of ordinary people on public issues from the other hand (CBOS).

The results of conducted research to date, which are connected with organizations acting on behalf of rural areas, also do not show NGOs in a good light.

Drawing on what we have known from the surveys, it would seem that among those who acting in the organizations are mostly officers (46%) and teachers (31%) – diagram no 2.

Challenges of the Modern World - Contemporary Economy and Globalization
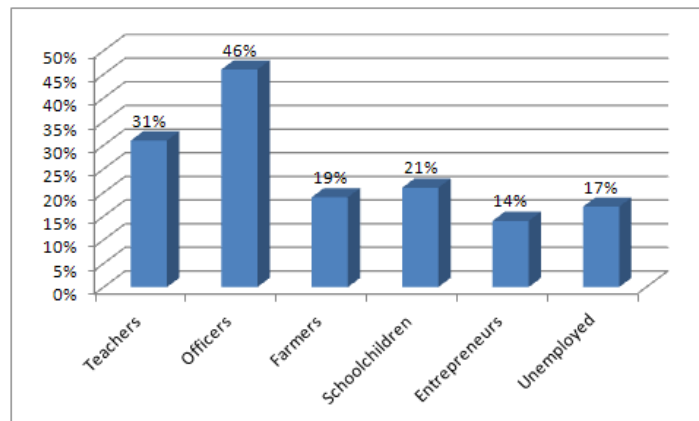
Chart 2: The most active members of organizations (Own analysis)

This first category is also working for both NGOs and public institutions. The fact that civil society involves specific members of communities is an example that ordinary people do not believe in the power of this kind organizations. In this way they are biting the hand that tries to feed them.

A similar situation occurs with the number of active members. In reality not many of NGOs participants are acting. In most cases it is up to 50 % (up to 25% - 35% of tested NGOs, 26-50% - 35% NGOs, 51-75% - 12% NGOs and over 75% - 18% of NGOs).

Of course, from a subjective point of view, many good things may be said about condition of Polish rural NGOs, but like was mentioned, the 3rd sector in Poland is not very strong, what we can see in the annual budget of rural non-governmental organizations which is less than 50 000 PLN (about 12 000 euro) – diagram no 3.
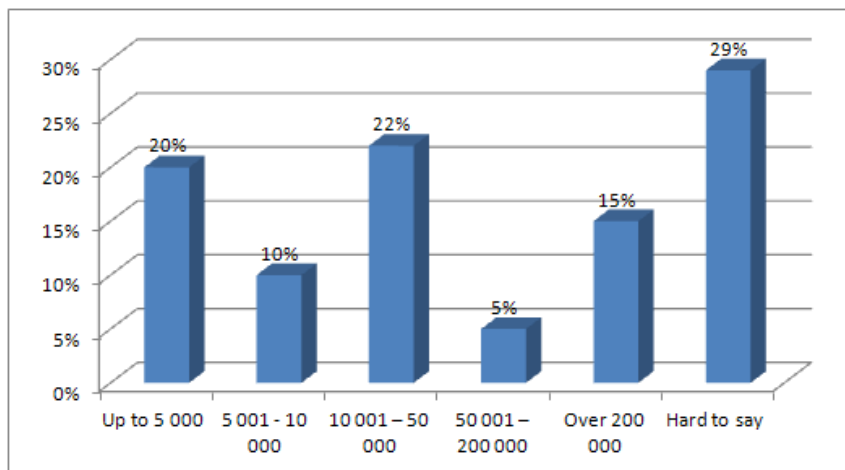
Chart 3: Annual budget (in PLN) (Own analysis)

This weakness issue also causes significant influence on the unfavorable situation of these institutions. The disadvantage of this issue means that NGOs are unable to conduct many activities and most of the organizations consisted of less than 2 projects. Furthermore most of the projects had budgets under 10 000 PLN (about 2 500 euro). Significantly regarding the funding, as much as 75% of organizations did not apply for funds and 70% of respondents did

not intend to apply because of too complicated procedures and luck of needs, and it unfortunately is not sufficient. Looking more closely at the issue, we see that the vast majority of organizations assess their financial situation as average (39.6%). However, worthy of note is a fact that about 23% of organizations indicate financial problems.

Moreover, organizations often do not apply for resources from the EU because there is a required contribution, which they do not have. They emphasize the need for policy change, otherwise small non-governmental organizations will have to reduce or suspend their activities. Another, an oft-pointed reason for not applying, is the lack of social trust, which binds to the precedents that took place in the local community (on several occasions it was indicated that the associations were deceived by people who were recruited from the outside to raise funds). Only in the one of southern province – Opolskie Vievodship – does much of the organization does not indicate greater difficulties/barriers. Perceive their situation as good. This is mainly due to the fact that they are related to the German minority, so most of their funding comes from the German government.

Non-governmental organizations also face many other problems. They have to face if they want to exist. Next to the already mentioned financial problems (58.9%), NGOs point out the difficulties of administrative difficulties (33.3%) and lack of interest of the local population (21.1%) – diagram no 4.
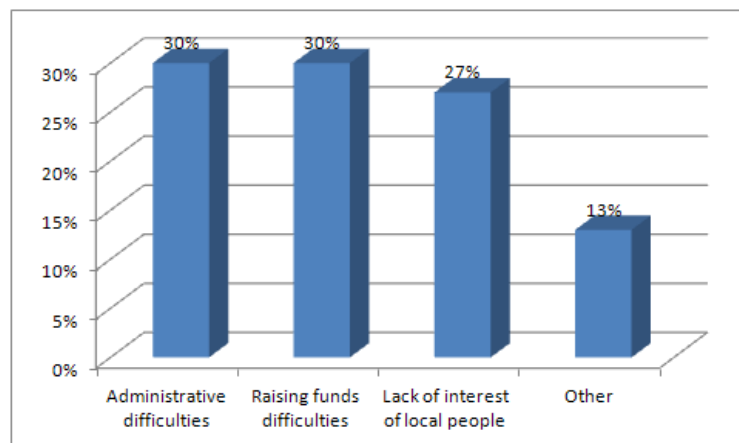
Chart 4: Difficulties according to NGOs activities (Own analysis)

We can see, that non-governmental organizations could be the motor of change and be one of the main factors that led to develop civil society in rural areas in Poland. But unfortunately they are not.

This picture emerges from the way of thinking of the members of NGO, which emphasized that there is no one solution for improving the condition of civil society on rural areas, but in overcoming this negative situation, which has arisen, especially helpful could be additional financial support (like as was mentioned by 82%). But to overcome the obstacles accordance to running NGOs also is needed specialist knowledge that may be provided to members in the form of training, especially in the field of fundraising and mobilizing people.

The preliminary analysis give not a uniform picture emerges of NGOs and rural development in Poland. Surveyed organizations are diverse in many ways, such as in the size, by the profile

of action, development prospects, to financial resources. Profile reflects the characteristics of the surveyed organizations of all NGOs operating in the country.

Therefore, results that were obtained show only the problem of civil society development in rural areas in Poland, which results from the weakening of the capacity of rural residents in the area of identifying and shaping their own individual lifestyle, needs and their own value systems and to influence on decision concerning their local environment. Furthermore studies undertake in this project had increased understanding of the importance of sustainable development as well as bottom-up actions. They illustrate mechanisms that allow for more efficient building integrated and informed community primarily and increase the involvement of villages' residents in making pro-development initiatives in the sphere of civic activities. Demonstrably that which was implied was a non-possibility of overcoming the crisis of rural area without full involvement of the local population.

5 CONCLUSION

Civil society has been an important area of study for sociology and another social studies. The research examined civil society variously as a multidimensional phenomenon, an objective and subjective measure. This research provided an integrated and interdisciplinary knowledge. It allowed analysis of environmental problems of a human nature and understanding the role of social factors in the community developing process.

This article has increased understanding of the importance of local development caused by non-governmental organizations because it is common knowledge that NGOs play one of the leading roles primarily and allow for more efficient building of integrated community secondly. And finally, in the long-term goals non-governmental organizations can better adapt their activities to the needs of local communities.

NGOs become a tool of social change. Is helpful and facilitating factor in the development of civil society. A progressive tool to change society for more egalitarian. It is a good beginning, because we cannot change all world but we can start somewhere. Therefore we can say that *civil society has many different faces, Mr. Hyde may be the result even where Dr. Jekyll is the objective* (Edwards, 2009, p. 109).

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Challenges of the Modern World - Contemporary Economy and Globalization

QUO VADIS GLOBAL ECONOMY? (TITANIC (THE WORLD ECONOMY) SAILS ALL OVER THE WORLD OCEANS WITHOUT A CAPTAIN)

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ABSTRACT
The world economy is in the process of globalization lacking economic theory of globalization. Consequently, we are heading towards a new type of society as a ship without a captain. We think that in the near future world might be confronted with either mega-capitalism or post-capitalism. This projection we deduce from dialectic of globalization. Sure, the process will be followed by the death of the territorial state. Of course, a different future scenario is possible as a way for cyber post-capitalism. Evolutionary transformations of capitalism would give the right of Marx and Keynes and their vision of society expressed in the "Capital" and "Economic Possibilities for our Grandchildren." The first principle of the welfare society to become global citizens, and that means the elimination of market state…Let us not forget even R.Hilferding!

Keywords: Globalization, Dialectic, Mega-capitalism, Theory

"Nothing is impossible in one so inexact sciences such as economics."
P. Samuelson

1 INTRODUCTION

Fukuyama has recently concluded that civilization is at the end of its evolution since it has reached the optimal model and time trends in the extant development of capitalist market-democratic type of society? Did not he to want to know that the structural dimension of the problem of the crisis of contemporary capitalism is the transformation of capitalism from an industrial into financial one? Instead Schumpeter, "creative destruction" and creativity, capitalism developed the "rent-seeking" financial capitalist which Eugene Famma's hypothesis of efficient financial markets transformed into Minski's financial instability. As if we have not learned the lessons of economic history since the "Tulip", "Mississippi" or some other "bubbles", cotton crisis, 1929. crises which all show that logic of Marx and Schumpeter is valid since the early days of the market - capitalist economy? Do we want to accept internal dynamic of capitalism and necessity of its dynamic transformation into a new stage of its development? Or we prefer to keep eyes closed being obsessed with present achievement?

It looks like we do not. For an old-fashioned economist, it would be a bit strange. For young and Nobel economists like Lucas, Prescott and Romero that is a funny issue. According to them, the business cycle is associated with real economic developments - technological changes. And that's it. Credit, money or leverage is of no significance in the development of economic cycles.

Therefore, the old-fashioned economist will not be surprised by three young economists study published in NBER Working Papers No. 17,621 in November, 2011. entitled "WHEN CREDIT BITES BACK: Leverage, Business Cycles, and Crises", in which they, as they claim, for the first time in economic history have found that the cycles goes up and down

hand in hand with credit expansion, which leads to a recession, possibly depression, when it comes to credit contraction and deflationary tendencies (Jorda, Schularick and Taylor, 2011.). These prominent economists seems never read Keynes, not to mention Marx, Fisher and Minsky.

How is this possible? Does nothing have significantly changed from A. Smith to 2012 year? Are we all prisoners of neoclassical economists who used to dominate XIX century economic policy as well as again economic policy of the end of XXI century? The beginnings of XXI century economics prescription of the IMF, World Bank for indebted countries worldwide is great come back of liaises-fair dogma.

In the first part of paper we discuss economic crisis and economic thought of renown economists. In the second part we discuss dialectic of globalization and its possible effect relevant for transition process from territorial into market sate. In the third part we address causality between economic development and development of economic thought. We point out that we do not have an adequate economic theory for globalized world economy which leads us to conclude that mega capitalism might be a next stage in the process of evolution of international world order based on reinvented neoclassical economic paradigm. New world order will be dominated by mega corporations and mega banks and the first principle of mega capitalism might be morbid maximization of profit of leading subjects followed by ever increasing democratic deficit.

2   DISTINGUISHED ECONOMISTS ON ECONOMIC CRISIS

In sufficient aggregate demand is taken by the administrations of many countries, starting with the USA administration, as the main cause of sub-prime financial crisis. Therefore, economic thought of J.M.Keynes has come again at the forefront of the economic knowledge. Following Keynes theory of insufficient demand many distinguished economists such is (Krugman, 2007; Stiglitz, 2007; Vade, 2008; Swartz-Nelson, 2007; Friedman and Swartz-Nelson, 2007; Ben-Barnanke, 2002; Romer, 2002; Pitelis-Argites, 2008; Crotty, 2008) identified present crisis as a crisis caused by insufficient demand. On the other hand, a few distinguished economist such is Taylor (2009) or Rogoff (2008), Minsky in The New Yorker, (February 4th, 2009), and Wikipedia find that aggregate over- absorption usually precedes recession. Our understanding of Marx theory of economic crisis, Stojanov (1985), Keynes theory of business cycle, and empirical data from XIX century (Marx) and from 1929 economic crash suggest that present crisis can hardly be cured by increasing demand. Moreover, increasing demand might provoke world-wide stagflation.

In an attempt to trace determinants of insufficient demand following the ideas of aforementioned economists, we consider that the main causes of insufficient demand might be classified as follows:

Insufficient demand is caused by both low level of personal and investment spending in relation with GDP (Krugman, 2006, 2007; Stiglitz, 2007; Vade, 2008; Bernanke, 2002).

Insufficient demand is primarily caused by wrong macroeconomic management-restrictive monetary policy: Bernanke (2002), Romer (2002), Friedman in Swartz-Nelson (2007), Insufficient demand is caused in two class model either by inadequate consumption of workers or in three-class model by insufficient consumption of financial reenters (Crotty, 2006, 2008; Pitelis-Argities, 2006, 2008; Orhongazi, 2007).

Insufficient spending is a consequence of asymmetric information, moral hazard and inadequate systemic regulation, Stiglitz (2007).

Sound highly surprisingly that no economist has pointed out to the drop of marginal efficiency of capital as a main cause of economic slump. Moreover, there are distinguished economists who even did not believe that an economic crisis is at all possible in XXI century due to the benefits the New Economy brings to field of microeconomics (Krugman, 2006; Summers, 2000). If we take as granted insufficient consumption as the main determinate of crisis, as suggested by aforementioned economists, we may post the following question in order to test proposition of insufficient demand:

1.) How is possible for an economy to be confronted with: balance of payments deficit and inflation if under -consumption in the economy persist and precedes the crisis.
2.) How is it possible that an economy face a sudden drop in assets prices just by changed expectations? Why the expectations are suddenly changed?
3.) How is possible that personal consumption drops down in time of full employment having in mind that according to all economic schools full employment provides the highest level of wages?
4.) Why an economy experiences a drop in investment if not caused by fall in marginal efficiency of capital (MEC)
5.) What factors bring about a fall in MEC: is it insufficient demand or an overheated economy as suggested by Keynes himself?
6.) Why no economist brings credit into analytical procedure which changes the standard textbook approach to Keynes's proposition concerning propensity to spend and consume?

We support an attitude that Credit –debt financed consumption and investment (high leverage) contribute to hyper absorption in an economy before economy face an economic downturn. Insufficient demand, therefore, is a consequence of previously overheated economy and consequent drop of MEC. Once MEC drops to low level, interest rate must follow the suit. As long as MEC is higher than interest rate (i) investments are profitable. Once investment becomes unprofitable, asset prices are endangered and expectations are falling apart. Te factories are getting closed and we get drastic fall in consumption both: investment and personal. Different interpretations of the causes of crisis ask for different economic prescription. If we take insufficient demand as the most important disease, does it mean that the crisis might be fixed out by additional demand? Or the crisis fixing requires more deep systemic changes in time of severe crisis such is present crisis as well as was the Great 1929 crisis. If crisis can hardly be solved by monetary and fiscal easing, politicians must be at work nationally as well as world-wide.

2.1 Could Keynes help us today?

Keynes economic thought was more an evolution than a revolution in development of economic ideas. Still, it was a great and influential economic model shaping world economic development since II Second World war during time of underemployment, and all way around until the beginning of 70s. Keynes medicine can hardly be efficiently applied except in time of depression. An application of Keynes before slump occurs might only prolong the boom for some time, and finally end up in stagflation. This is eventually a reason what economists differ significantly in explaining and applying Keynes under different circumstances for. Additionally, one should be aware that Keynesianism likewise Monetarism or Supply-Side

economics are in its essence suitable economic policies for different stage of a business cycle taken from a national economic perspectives .Under a global world economy the application of Keynes medicine, likewise of any other known school of economic thought becomes highly questionable. Therefore, if current world retreats back into some sort of" soft nationalism" those economic policies might be useful again. And what is the most scare moment from Keynes story for us who live in XXI century is the process of capital depreciation and its duration which was (and might be again) long and time consuming process. "At the outset of the slump there is probably much capital of which the marginal efficiency has become negligible or even negative. But the interval of time, which will have to elapse before the shortage of capital through use, decay and obsolescence causes a sufficiently obvious scarcity to increase the marginal efficiency, may be a somewhat stable function of the average durability of capital in a given epoch. If the characteristics of the epoch shift, the standard time-interval will change."

Under depressed circumstances a state intervention might crowd out private investment both in capital and labor market .In order to be effective state intervention should be undertaken under different social circumstances from those prevailing before the onset of crisis. New profit mathematics needs to be developed, and profit maximizing should stop to be the first principle of a society. That is exactly point quite understood by Keynes, but not welcomed one by him in the same time. However, that is exactly point Phelps is stressing out, and an idea that needs to be elaborated by contemporary economists and politicians. New time ask for new economic solution...That is presumably why Krugman and Stiglitz do not trust into the efficacy of monetary policy at this stage of economic affairs of the USA economy , and C. Romer, A. Swartz, Bernanke likewise Friedman (for the Great depression) do trust only to expansive monetary policy and devaluation of currency as an effective cure. We would say majority of them are seriously mistaken, and probably Phelps is most realistic respecting the time and circumstances we live with. Therefore, we conclude that the world needs a new social fabric to be developed and followed by suitable economic paradigm because two extremely important points are missing from deliberations of majority of distinguished, but confused contemporary economists. These points are internal dynamic of capitalism and dialectic of globalization.

3   DIALECTIC OF GLOBALIZATION

There are many definitions of globalization. All of them are more or less confined to the country's integration into the international division of labor and integration of production factors in international scale. So, Bhagwaty (2004) defines economic globalization as "the integration of national economies into the international economy through trade, foreign direct investment, short-term capital movements, international mobility of workers and aid workers in general, and international technology flows" . Anne Kruger defines globalization as "a phenomenon thanks to which economic agents in any part of the world much are more influenced by events in the world than before "(Wolf, 2004). A lot closer to us is Henderson' definition of globalization. David Henderson, chief economist of OECD defines globalization as "the free movement of goods, services, labor and capital, while creating the single market of inputs and outputs, and full national treatment of foreign investors, as economically speaking, there are no more strangers" (Wolf, 2004).

We hold that, in this and similar definitions of globalization are technical and superficial definitions, which do not reflect the dynamics of the capital. We are most prone to own politeconomic definition that holds that globalization is a process of privatization of the

world's economic resources by large capital, often virtual and hybrid, as evidenced by the exponential expansion of financial derivatives, the last twenty years, whose value has reached 457 trillion Euros in 2007 (Deutsche Borse Group, 2008). And, if privatization is a political process with the economic consequences, often accompanied and favored by policies of international financial institutions, we dialectically come to the conclusion that globalization is the process of transforming territorial (national) market into global corporate state as a new stage in the development of capitalism, which would we call mega capitalism, which makes the observed dialectical stage of capitalist development, which precedes to post capitalist society, as it was seen by Marx (Capital), Keynes (Economic possibilities of our grandchildren) or Hilferding (Financial capital). Practically observed under conditions of contemporary globalization global economic crisis is a process of centralization of capital on a global scale, which this time happens in conditions of imperfect global market structure.

4   THOUGHTS ON THE RELEVANCE OF ECONOMIC POLICIES

In the development of economic thought to date, there has been a fascinating interdependence between economic events, economic ideas and economic policies. One of the most obvious examples of the interaction since the Second World War is the change of focus from unemployment, a Keynesian idea and economic policy, to inflation that is Monetarism, as an idea and policy. An analogous change occurred in the acceptance of Phillip's curve and Ocun's law from the Second World War until 1970 and their replacement by the vertical Phelp's curve together with the notion of rational expectations. With the formation of the IMF and GATT), stage was set for the greatest prosperity that the world economy has ever experienced to date. In the years immediately after 1945 the supply curve of national economies showed a positive Keynesian slope. During the fifties and sixties "it came to be accepted wisdom that businessmen were always in a position to set prices at a margin over costs that would provide them with a rate of return at which they would be happy to invest more. The OEEC in a 1961 report stated: 'The share of labor, apart from cyclical shift, remained remarkably constant in almost all countries around 1950. With high employment, business has been able to maintain a profit margin' (Marris, 1984). During the fifties it became generally accepted that the Phillip's curve, that is a Keynesian type of economic policy was completely compatible for national economies in their attempts to control deflation and also inflation.

It is certainly true that in comparison with XIX century economic liberalism internal economic equilibrium came to have priority over equilibrium of the balance of payments. Foreign trade and currency measures were targeted to achieve affirmative and useful effects from the foreign trade multiplier and accelerator in the interests of economic growth of the national economy. Keynesian economy policy at home was supplemented by choice of a growth strategy based on the theory of the comparative advantages of the 2 x 2 x 2 model. At the beginning, while the argument for protecting new industries was valid, a policy of import-substitution was the dominant strategy for the economic growth of small open economies as well as for large countries. In time the small open economy, which had become a price taker, became more and more geared to an export growth strategy, and had become not only the price taker but also the rule taker. Concentration on the production of an increasing number of tradables ever increasingly made the small and medium countries dependent countries. Unless, of course, the countries concerned had opted for the Prebish or Myrdal models of isolation from the world economy with all the negative consequences of such a decision for growth (as was the case of Latin America). In spite of this, the production of firms of the small open economy more or less completely became part of the

offer curve of national economies. The process of transnationalization of the world economy had begun.

In 1958 the currencies of the EEC countries became convertible with the result that their markets and their economic policies became interdependent. Europe has very quickly become competitor to the USA. From 1960-1965 wages in Europe and Japan, the main US competitors, rose from between 2-6 per cent annually, while wages in the US fell during the same period 0.7 per cent. The new wage relationships caused a balance of payments surplus in America which reached 6.6 billion dollars in 1964 (Mandel, 1972). However, acceptance of the concept of full employment based on the slogan ¨We're all Keynesians today¨ required in the USA, and not only there, an expansive monetary policy. In the meantime the expenses of financing the Vietnam War increased; with the result that inflation soon became enemy number one for the American economy. In 1971, the first time since 1888, America had a balance of trade deficit of 2 billion dollars. The offer curve of the American economy had become a vertical. The world was at that point looking for a new economic policy. When the supply curve had become a vertical Keynesianism became counterproductive. Nevertheless, economists went on trying to cure stagflation by counterproductive Keynesian methods supported by a policy of fluctuating currency rates of exchange. By passing to fluctuating exchange rates in an attempt to save Keynesianism, the effect of the Phillip's curve deepened stagflation the world over. This showed that although the world might have become interdependent, isolationism was still very much alive. In other words priority was still given to the national interests. The supranational concepts, like the process of transnationalization in the world economy, were to gain impetus as soon as the time was ripe. The prosperity of the world economy was certain at some point or another to come to an end. According to C. Dumas "the long expansion of the 1950s and the 1960s consisted to a considerable degree of more of the same ... This relates directly to the inadequacy of present capacity, not only in the implied need to invest in new industries' and write down the capacity in shrinking traditional industries but also in the need to transform by new investments the productive processes of industries with still salable products but outmoded method... Both the incentive to apply advanced labor-saving technology and the actual development of such techniques have to be linked to the large increase in wage cost over the past thirty years" (Dumas, 1985).

The world economy had to enter a phase of structural transformation. This was well presented by Schuker in his «American Reparations to Germany» in which he gave a reminder that the world economy had for 300 and more years experienced what he called-long waves. Long waves went together with the process of the concentration and centralization of capital - that is with the growth of firms and their efficaciousness (Schuker, 1990). The natural result of this was that after 1980 Keynes was replaced by Monetarism. New economic credo becomes the thought: "Governments do not solve the problem, they are the problem. Modern economic policy considers that Welfare State had played out its role of the guardian of economic progress and prosperity. The new economic policy operated under the slogan: "The best industrial strategy consists of tough penalties for business failure, high rewards for success and low interest rates without inflation. Monetarism, renamed at the end of XX century as neoliberalism (neoclassicism), became the "mainstream" economic policy. Even so, Neoliberalism is still a national economic policy; it still has a national identity. While operating with national economic development goals, it has achieved structural transformation of the economy in all countries where it took hold. During that process it led to the centralization of capital and the creation of

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gigantic companies. The redistributive effects of the monetarist type of economic policy in the case of USA can be best seen from the following table.

Table 1: Deconstructing National Income (Bichler and Nitzan, 2012)
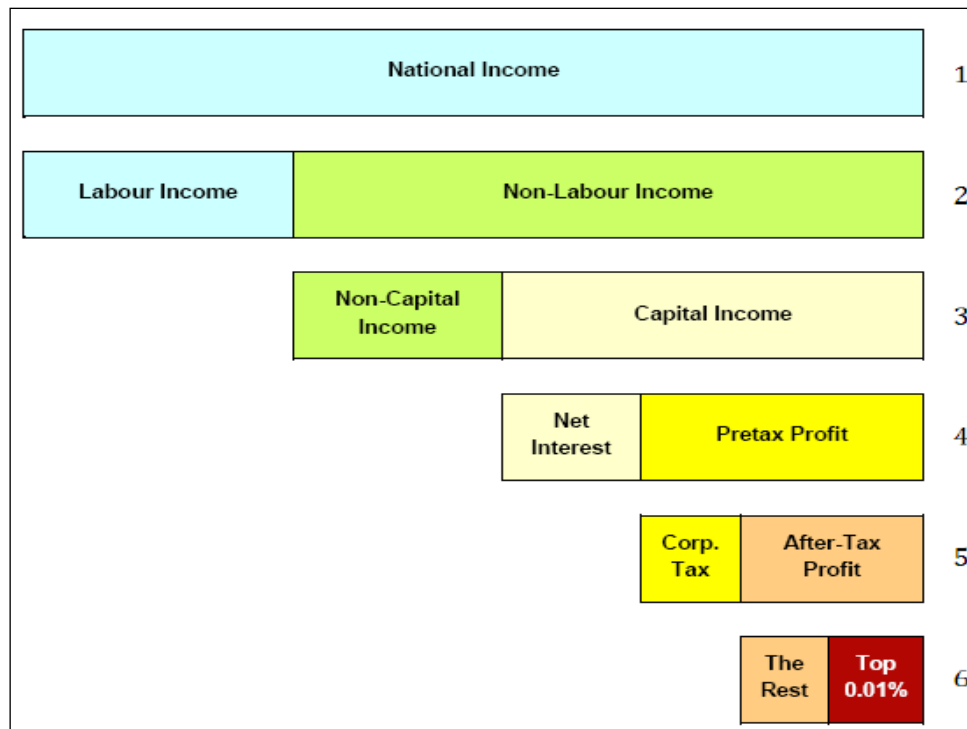
These observations, along with the forward-looking outlook of capitalists, suggest that the current crisis may be the result of capitalists becoming not weaker, but stronger and that capitalist power may be approaching its social asymptote – a level too high to sustain, let alone increase.

Monetarism achieved structural transformation of the economy in all countries where it took hold, and in the process led to the centralization of capital and the creation of gigantic companies. In the world economy it created conditions for intercontinental economic integration of companies. According to Denis Lumb competition in traded goods rose significantly, since such goods are exposed to global competition. «Between 1979-1989 in America 1.4 million jobs were lost in industry, yet industrial production increased by about 30 per cent. Integration between the transnational corporations of the USA and Europe attained 200 billion dollars annually. In 1989 alone in Europe the business of European transnational companies was integrated by more than 50 billion dollars. Between 1984-1988 direct European and Japanese investment in the USA increased by 108 billion dollars and 37 billion dollars respectively» (Marris, 1984).

The net profit of the Top 0.01% are earned, at least in part, outside the United States – in what the statisticians call ROW (rest of the world). -: Bichler and Nitzan (2012).The raw data that underlie this chart are fraught with hazards of estimation and interpretation, but the overall long-term trends they portray are probably valid. The thick series at the upper part of the chart plots the proportion of US after-tax profit coming from outside the United States (including both the foreign dividends and reinvested earnings of US-based corporations). According to Bichler and Nitzan (2012), the data show that during the 1940s

and 1950s, ROW profit amounted to less than 10 per cent of the total, but that its growth has been rapid and that its level now hovers around 50 per cent of the total! And here arises an interesting question: indeed, who or what is to prevent US corporations from using their power world-wide? Except maybe foreign competitors coming from Europe, China, Asia and Russia which taken altogether constitute the global "market" state.
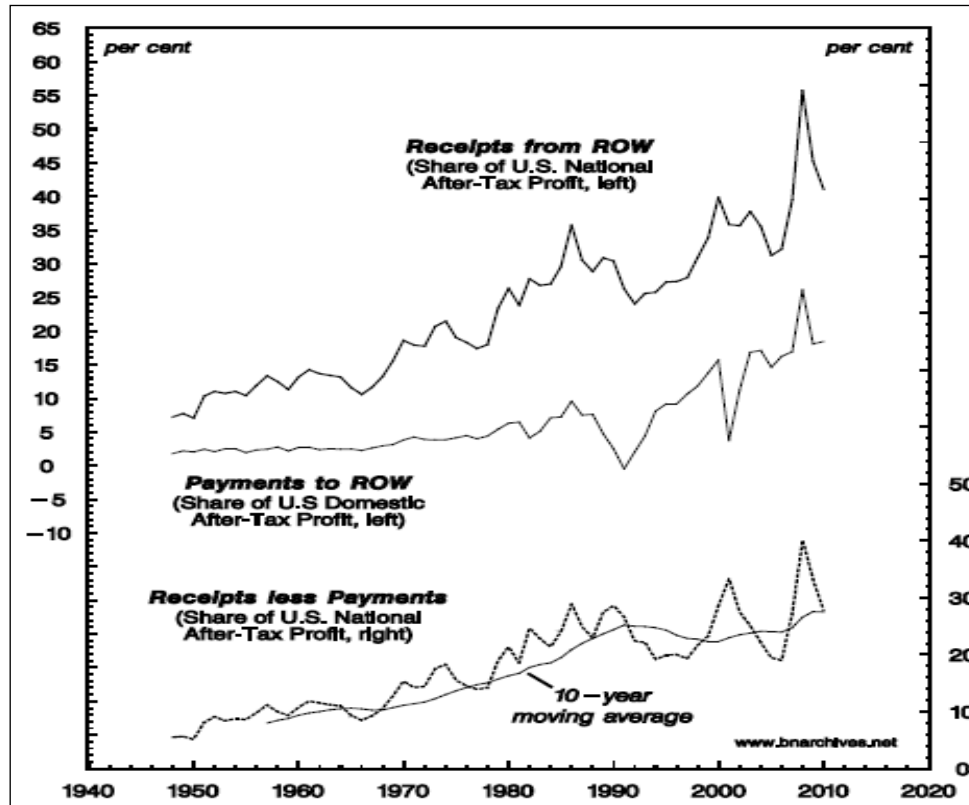
Chart 1: Rest of the World: Receipts and Payments of After-Tax Profit (Bichler and Nitzan, 2012)

Graham's contention concerning the production of "goods in common" is vindicated today. It seems that the production of "goods in common" demands the formation of a world economic policy and a world government. In other words, it means replacing national economic policies with a global economic policy.

The basic economic entities of our time are becoming transnational corporations as the entities which reflect globalization process. The basic microeconomic principle of their behavior is the principle of increasing returns and diminishing costs! Transnationalization and globalization of the world economy forms a global market, but the market, whose one of the main characteristics is imperfect competitions with the prevailing oligopolistic market morphology. In an oligopolistic global market large corporations become "price makers" and "" rule makers "also. The market does not determine the behavior of market participants such as is the case under the conditions of full competition. In fact, the "great" form the market and run it, they share it. Transnational corporations spread their production around the world in order to minimize production costs, and the same time they use "world demand curve „as a source of their marginal revenue. So while the existing microeconomic theory helps understanding the operations of transnational corporations, global economy

macroeconomic theory is neither on the horizon. In all this TNCs significantly influence the formation of macroeconomic and development policies of countries all over the world which is becoming addicted to FDI, that is of the capital that TNC have in abundance.

Whether any of the assumptions of virtual neoclassicism is valid in such an emerging global world? If not, then neoclassicism in time of the global economy deserves to go into the memory hole. Again, the global economy does not have a theoretical construct as seen from the angle of the global economy as a whole. What we want to optimize from the point of view of the global economy? Is that the GDP? Whose GDP should be optimized: either that of the global economy, or GDP of less and less sovereign individual countries which are by global privatization deprived of their resources? What about the issue of employment? What about the issue of optimal allocation of resources at the macro (global) level or about the issue of general equilibrium?

Globalization provokes a number of issues related to the process of economic development and its effects on both the host country and the capital exporting country. For example, an American transnational corporation produces a product in China while exporting capital from US. Then, it imports the produced goods from China back to the US. From the point of view of standard balance of payments statistics this transaction is clean and clear. However, from the angle of property rights (especially capital), policy and economic issues seem to be much vaguer on how to treat such a transaction. Does the US import its own goods produced by its own capital and knowledge, or does it import Chinese goods? Foreign direct investment and transnational corporations in the global economy provoke confusion between the "territorial" state and "market" state. The balance of payments issue, at first glance, is perhaps only the beginning of opening the Pandora's Box which will have to be opened and studied by the new economists. Once opened, the Pandora's Box of globalization will have a profound impact on relations between the "territorial" and "market" state as well as on the relations between virtual neoclassicism and real corporatization of the world.

Economic science, which until the age of extant globalization generally reflects national economic interests, presumably has to be transformed into economic science, which reflects the interests of new core subjects of globalization of society; such are transnational mega-corporations and transnational mega- banks

5   CONCLUSION: TOWARDS MEGA-CAPITALISM

The history and experience concerning development of both economic reality and economic theory suggests that the strongest interest groups are the ones that define the economic system, economic policy and economic institutions. If these interest groups today are depicted in a form of corporate power centers, as we believe to be so, then we are free to suggest that we are heading towards "Mega-capitalism"! "Mega-capitalism" seems to be the next stage in the development of capitalism, which will be dominated and led by both mega-corporations and mega-banks. This, in turn, will result with global cybernetic robotization of workers. This process might be supported by neuro-economics, which we would define as cybernetisized neoclassical economics applied under imperfect market conditions. This is because extant economic doctrine is dominated by neoclassical economic theory regardless of the fact that such a theory has definitely become obsolete. Therefore, contemporary economist is lost in the fog of inadequate economic theory. Sure, the process will be followed by the death of the "territorial" state. This process reflects the centralization of capital on a global scale. This

process, however, is evolutionary and repetitive since the beginning of the capitalistic way of production.

Economic science, which until the age of globalization ,generally reflect national economic interests, will be transformed into economic science, which reflects the interests of new core subjects of globalization of society, such as transnational corporations and transnational mega banks. When and if there is a morbid affirmation of the first principles of globalization-profit globally reached, global society will then be ready for its transformation into a post-market and post-capitalist society and economic science will lose its meaning. Evolutionary transformation of capitalism would give the right to Marx (1962) and Keynes (1932) and their visions of a new society as they expressed in the "Capital" and in the "Economic possibilities for our grandchildren". The first principle of the welfare society is to become global citizens, and that means the elimination of the "market" state. Hilferding's (1952) fate of the world has been similar except the fact that the path towards post-capitalism is paved by the "expropriation of expropriators".

If, however, the process becomes retrograde and the "territorial" state overthrows the "market" state, then the thoughts and reflections of the French School of economic war (which is these days advocates the so-called "intellectual protectionism") might become very realistic and attractive. We think that modern technology and cybernetisation of the economy and civilization might not survive this retro course of events without global social, economic and political earthquake a few degrees stronger than that of 1929.

Let us conclude that a Titanic (global economy) sail over the world oceans without captain as far as economic science is devoid of its theory.

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CRITICAL SUCCESS FACTORS FOR PRO-INNOVATIVE COOPERATION BETWEEN FIRMS – EMPIRICAL RESEARCH IN POLAND

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ABSTRACT
Nowadays the idea of cooperation is said to be one of the key elements of modern management model that answers the challenges of global economy. This approach follows from the assumption that in today's highly complex and rapidly changing world, cooperation between firms has become an imperative for survival and success. It results from the fact that globalization calls for new ways to compete and demands a different philosophy of doing business. Old rules of strategic thinking probably will not be effective in the future due to the acceleration of technological development, the shortening of product life cycles, increasing difficulties in defining potential clients, markets and competitors. In the contemporary world enterprises act under permanent pressure of economic, technological, political and social changes. In such unstable circumstances the issue that become significant is innovativeness. Increase of the enterprise's ability to create and commercialize innovations today is the base for strengthening their competitiveness. The issues of innovations are essential for firms' development and competitiveness. In times of dynamic spreading of "New Economy" conditions we can observe the change in the process of creating innovations. Market experience shows that quite frequently innovations are stimulated and created by developing close relationships with other enterprises. The paper addresses two tasks. The first part of the paper provides an theoretical overview of the idea of inter-firm pro-inovative cooperation and general conditions fostering its development. The second part of the article presents the research findings which indicate critical success factors for pro-innovative cooperation realized by Polish companies. The article highlights the importance of making pro-innovative relationships work. The major objective of the research findings presented in the paper is to find the answer to the question on what are the most important conditions enabling to accomplish all goals set by the partners for a specific pro-innovative relationship.

Keywords: Critical success factors, Inter-firm relationships, Pro-innovative cooperation

1   INTRODUCTION

The ability to cooperate, and in particular to manage cooperative arrangements, has already become one of the core competencies which companies must possess in order to ensure their survival and future success. Mangers of modern enterprises have to realise that they should compete in a way that enhances rather than undercuts inter-firm cooperation. This approach refers to the phenomenum that is called the great management paradox and which consists in the fact that increasing competition requires increasing cooperation.

Successful managers must be skilful collaborators and should understand when and how to share resources, to combine forces, to do things that benefit another partner – in the interest of superior overall performance of all cooperating parties. The point of the current company shape-up boom is to achieve synergies – the value that comes when the whole adds up to more than the sum of the parts.

Increasing interest in the meaning and importance of inter-firm cooperative relations as elements of the enterprises development strategies result from the fact that these relations on one hand allow firms to gain new advantages and on the other strengthen the ones already existing. Implementing cooperation strategy and building different partnerships on the market enables not only to sustain enterprise's market position but also to develop further. Additionally in times of spreading the "New Economy", which means dynamic increase in knowledge resources, using only one's own potential is definitely not enough. The ability to accumulate knowledge from all possible internal and external sources is of strategic value nowadays. Thus properly constructed strategy of building firms competitiveness and managing knowledge needed to be innovative today is based on the capability to cooperate with other actors of the market place.

2   THE IDEA OF INTER-FIRM PRO-INNOVATIVE COOPERATION

Studding the issue of firms' competitiveness, brings to the mind an important question: why firms differ in their conduct and profitability? It seems that the conduct and profitability of enterprises is highly influenced by strategic relationships in which they are embedded. The ability to create sustainable competitive advantage depends on many factors since the conditions in the environment are constantly changing. The competences and resources creating a competitive advantage today may be ineffective next year, because the situation in technology, market or competition has changed. Due to the fact that creating sustainable competitive advantage of the firm requires having access to many resources and capabilities, it is very difficult to create competitive advantage individually. In such conditions cooperation with others market actors seem to be a good way of improving firm's conduct and ability to compete successfully.

Nowadays, successful managers must be skilful collaborators and should understand when and how to share resources, to combine forces with other companies operating on the market. Cooperation is a new way of creating firm's strategy. According to authors analyzing the matter of inter-firm relationships, today "the essence of strategising is in coping with and taking advantage of relationships with surrounding companies in their entirety. These companies include suppliers, customers and competitors. Co-operation and competition are not simple dichotomy for companies. Instead, strategising involves simultaneous elements of co-operation, conflict, integration and separation in company's relationships" (Ford, Gadde, Hakansson and Snehota, 2006, p. 3).

Based on literature review, we can point out several definitions of cooperation understanding it very widely. Cooperation between enterprises can take place through a variety of different arrangements which include relationships with suppliers, intermediaries or customers, but also relationships with current or potential competitors. All they are formed to facilitate company's ability to achieve some strategic objectives or enhance firm's competitive position on the market (Berg, 1991, pp. 72–73; Graham, 1988, pp. 473–485; Mohr and Sengupta, 2002, p. 284).

In narrower sense cooperation is defined as inter-firm relations having certain characteristics: they are changeable, they have limited range and duration and they set cooperation agreements that make up the base for common work (Adamik, 2008, p. 73).

According to literature sources, the definition of inter-firm relationships highlights their three fundamental features (Czakon, 2007, p. 46):

- the exchange concerning the subject of relationship,
- the commitment that leads to deepening and spreading the existing exchange,
- mutuality including the symmetry of commitment and community of interests.

Above mentioned features suggest that inter-firm relationships are characterised by long-term orientation of cooperators who engage their resources and are willing to adapt their operating processes in order to obtain mutual benefits. In the literature there are many explanations of relationship nature. It seems that one of the best says that inter-organisational relationships are the relatively long-term linkages that occur between organisations which agree to change the way they do business, integrate and jointly control some part of their mutual business system and share mutually in the benefit (Dull, Mohn and Noren, 1995, p. 65).

It is indisputable that inter-firm cooperation brings about several positive effects for involved partners. Taking into account that today companies are becoming less complete and they frequently need new resources and competences, developing close working relationships with other enterprises allows firms to extends their reach without increasing their size. In this sense, strategic partnerships are a potent way to do more with less. One of the fields in which cooperation is becoming more and more important is innovativeness. Today there is considerable agreement among writers and practitioners on the view that innovativeness makes up the base for company' s competitiveness.

In recent decades it has been recognized that innovations are generated mainly in cooperation with other firms, such as suppliers or even competitors. But in order to create any new process or product together, the companies have to develop a close and strong relationship. It is due to the fact that today inter-firm relationships provide essential building blocks to access dispersed capabilities. As such, they have far-reaching implications for filling assets gaps in enterprises and improving their ability to create and commercialize innovations.

In the conditions of strong and still increasing competition only firms that are able to find or create new development directions, new solutions, processes and products can become competitive. This means that competitive company must be also an innovative company. Therefore, it must first create and then develop several relationship with other market actors in order to get access to different resources and to be well informed about contemporary trends and market changes.

As nowadays competitiveness is associated with orientation on innovations, in the field of cooperation so called pro-innovative inter-firm relationships have occurred. The relationships of this type are relatively enduring transactions, flows and linkages that occur between enterprises and are aimed at improving the ability of firms to create innovations. It means that such kind of relationships are orientated on knowledge transfer and learning that is necessary to generate innovations (Sudolska, 2011, p. 79). Partners in such relationships agree to change the way they do business, integrate and jointly control some part of their mutual business system and share mutually in the benefits. Pro-innovative relationships on one hand refer to competence building and on the other hand to competency leveraging that means applying competencies to market opportunities. Both mentioned actions are taken by the enterprises to generate learning resources that enable creation innovations (Mitra, 2000, p. 231).

3   CONDITIONS FOSTERING THE DEVELOPMENT AND SUCCESS OF PRO-INNOVATIVE RELATIONSHIPS

Given the increase of globalization of the world's economy, the importance of creating and maintaining successful inter-firm partnerships is emerging as a critical strategy to be considered by the enterprises.

There are a number of variables that exist in the literature, which are considered as very important to the successful functioning of inter-firm cooperation. In the table 1 the main factors recognized as those that lead to the success of inter-firm relationships are presented.

Table 1: Main variables that are critical for the success of a relationship
(Heffernan, 2004, p. 116)

Researcher	Relationship success variables
Adbor (2002)	Trust, communication
Handfield and Bechtel (2002)	Trust
Hunt, Lambe and Wittman (2002)	Trust, commitment, communication
Simpson and Mayo (1997)	Trust, commitment, satisfaction
Gummesson (1996)	Trust, collaboration, longevity, closeness
Morgan and Hunt (1994)	Trust, commitment, communication
Mohr and Spekman (1994)	Trust, participation, coordination, commitment
Ganesan (1994)	Trust, commitment, satisfaction

As it can be seen there is a considerable agreement among researchers on high level of mutual trust as critical component of development and success in business relationships. Trust is recognized as the fundamental component for successful business relationships due to fact that cooperation between organizations creates mutual dependence.

The research findings argue that healthy, productive and successful cooperative relationships typically are characterized not only by a high degree of trust, but also by high level of commitment and information sharing within a communication system. Another important dimension of successful cooperation is high level of balanced interdependence.

Based on literature, it seems that the path of successful inter-firm relationship oriented on the increase of partners' innovativeness consists of the following steps. The first one is establishing the goals for particular relationship. For further healthy cooperation it is essential to formulate the goals in clear and measurable way.

While analyzing the process of relationship goals establishing, an issue that draws attention is covergance over strategy of cooperating firms and their strategic goals (Volkokari and Helander, 2007, pp. 597–608). When collaborators share common strategic vision and additionally they really understand each other, the base for learning within this relationship is made up in natural way. In such situation both partners show high level of commitment and are willing to share the knowledge they possess. This usually leads to creating specific base of knowledge which is common asset of relationship participants. In result, it strengthens mutual trust of cooperating enterprises and stimulates relationship development.

When cooperation starts developing, there are several signs of this process. Among them we can point out building the communication system for the relationship, specific investments

done for the relationship, resources' sharing and modification or setting outcomes measurement system for the relationship. Such activities undertaken by the cooperators result in gradually increasing and developing mutual trust of relationship parties. A consequence of this process is an increase in satisfaction of cooperating companies. While collaborators see that together they can obtain several benefits they have planned earlier, the level of satisfaction is growing up and partners get the proof of good strategic choice they have made. The ability to obtain particle goals, one by one, increases mutual trust existing in the relationship and that way strengthens the whole relationship.

In the literature there are several approaches to trust. Nevertheless, common to most definitions of trust is a confidence between the partners that the other one is reliable and that the partners will act with a level of integrity while dealing with each other (Morgan and Hunt, 1994, pp. 20–38; Zuker, 1986, pp. 53–112).

Ring and Van de Ven defined trust as "an idividual's confidence in the good will of the others in a given group and belief the others will make efforts consistent with the group's goal" (Ring and Van de Ven, 1994, pp. 90–118). From the perspective of inter-firm cooperation trust means "having sufficient confidence in a partner to commit valuable know-how or other resources to transactions with it despite the fact that, in so doing, there is a risk the partner will take advantage of this commitment (Child, Faulkner and Tallman, 2005, p. 50).

Trust within the relationship develops gradually as the cooperating firms move from one stage of relationship to another. At the beginning of relationship the trust between partners is based on calculations made by them. Then the firms operate together and their activities and outcomes confirm the validity of calculative trust, they begin to develop the knowledge base about each other. Based on literature review, at that stage partners are able to enter the level of mutual trust which now is based on mutual understanding. This category of relationship trust has been also defined as cognitive trust (Lewicki and Bunker, 1996, p. 121).

A further transition of trust build within the relationship should come when "normative trust builds on the depth of knowledge that the parties have acquired of each other and on the mutual confidence they have developed" (Child, Faulkner and Tallman, 2005, p. 57). It is worth noted that repeated interactions between cooperating firms which are perceived as successful enhance their mutual trust. And as the companies of the relationship know more about each other and trust each other, the more likely they are to reduce their emphasis on formal control mechanisms. On the other hand the level of their good will increases. The results that partners have already obtained from the relationship may encourage them to identify with each other's goals and interests. At this stage trust based on personal identification is likely to occur. This is the highest level of relationship trust, which partially emerge from issues relating to goodwill and competency, recognized by each partner at earlier stages of relationship development process. It is important to underlie the nature of goodwill within inter-firm relationship. Goodwill factors refer to partner does more than is formally expected while an unforeseen situation arises.

Concluding, if trust develops over time within the relationship, it serves as a stabilizing influence on partners, helping them to cope with shifts in bargaining power and other types of problems or crises. Trust is seen as the factor that reduces the probability of loss and enables cooperating firms to move forward even though uncertainty in the relationship may remain (Inkpen and Curral, 2004, p. 596).

Another variable perceived as critical to successful cooperation is inter-firm communication. Relationship communication is considered as a dialogue between partners focused on problems solving and decision making, developing new opportunities as well as developing interpersonal relationships. It should be underlined that "the world dialogue connotes an equity and mutuality of exchange of close relationships, whereas persuasion is a common form of communication" (Donaldson and O'Toole, 2002, pp. 150–151).

In the literature on inter-firm cooperation communication is perceived as the foundation process which facilitates relationship development and its ongoing maintance. According to Mohr and Nevin communication in the inter-firm relationship is described as social glue that hold partners together (Mohr and Nevin, 1990, pp. 36–51). Communication is an essential part of a system that particular relation creates, both in the stage of relationship formation and in the stages of its development.

Two most common measures of communication within the inter-firm relationship in the literature have often been associated with mechanistic and behavioral approach. The mechanical aspects of communication include the message content, the channel mode, feedback and frequency. The behavior measures cover communication quality, information sharing and participation (Donaldson and O'Toole, 2002, p.151). Quality of communication is associated with accuracy, adequacy, timeliness, completeness and credibility of shared information. It is important to note that the quality and intensity of information sharing is highly associated with the strength of the relationship. It has long been recognized that the higher the quality of information sharing and the more intense it is, the more likely is that a relationship will be stable and developing (Mohr and Spekman, 1994, pp. 135–152).

Another relevant issue while analysing the critical success factors of inter-firm cooperation is partners' commitment to relationship coordination and development. Commitment has been understood as partners' conviction that the relationship is beneficial for them so they undertake several activities in order to sustain it (Barry and Dion, 2008, p. 119). Therefore, it means that partners' commitment refers to deepening and extending the exchange between cooperating firms (Anderson, Hakansson and Johanson, 1994, pp. 1–15). In other words enterprises engaged in cooperation carry about the stability and efficiency of a relationship.

Partners' commitment to relationship can be of operational, information or investment character. Operational commitment concerns partners' shares in the whole venture undertaken together. The information dimension is related to communication process. In detail it refers to the type, frequency and forms of communication. It also takes into account the way of information usage by the partners. In practice information dimension deals with honest sharing of information that is essential for relationship development. Investment dimension of commitment concerns resource allocation done by cooperators (Czakon, 2007, pp. 82–83).

Here it is important to say that the commitment of cooperating companies first requires mutual trust between them. Such foundation makes cooperators more willing to share their resources, especially those of strategic importance, or information. In this context, we can say that trust is necessary condition for commitment to occur in the relationship. Moreover, mutual trust should make it safer for the collaborators to invest in their relationship particular assets which can not readily be used elsewhere and should reduce the temptation for one

company to take advantage of the other, because of the good will it represents (Child, Faulkner and Tallman, 2005, p. 53).

Concluding, the increase of partners' commitment to the relationship is viewed as the sign of cooperators' determination to accomplish the relationship goals. If partners commitment increases over time, it limits the risk of cooperants' opportunism due to the fact that they have previously allocated particular assets and they steer clear of the loses in the case of relationship breakdown.

All stages of the relationship development, from the very beginning to the end, are influenced by interdependence of enterprises cooperating for successful outcomes. Different approaches, while discussing the issue of interdependence within relationship, especially aimed at creating innovations, point out two facets. The first refers to the complementarity of critical resources engaged in the relationship and the second concerns resource allocation. Both mentioned above are perceived as being important elements of this interdependence.

Resource complementarity reflects the degree to which tangible and intangible assets of relationship partners enable to obtain the needed synergy. Most writers agree that an important issue concerning the resources assigned for cooperation is the way they are bounded. According to resource based view of the firm, creating any strategic inter-firm relationship means looking for the highest possible resource complementarity, then resource modifying and creating such composition that will be optimal to obtain the synergy effects. There is also a considerable agreement among researchers on the importance of any modifications of partners' resources. It is due to the fact that these changed assets are these elements which make up the relationship and create the interdependence bonds between partners (Dubois and Hakansson, 2002, pp. 46–47). Resource allocations refers to the use of different categories of resources (human, capital, know-how etc.) in developing any cooperative relationship. We should remember that cooperating partners often use different resources of each other and thus they allocate them outside of their enterprises. The more intensive it is, the stronger are interdependence bonds between relationship participants.

While discussing the critical variables fostering the development and success of pro-innovative relationship it must be emphasized that there are numerous factors influencing this process and they all connected in many ways. That is why it is very difficult to isolate particular ones and to propose their hierarchy.

4 CRITICAL SUCCESS FACTORS FOR PRO-INNOVATIVE COOPERATION OF POLISH FIRMS – RESEARCH FINDINGS

The empirical part of the paper identifies the main conditions that impact the development of pro-innovative relationships and make these relationships work.

Investigation of critical success factors for pro-innovative cooperation between firms was one of the components of big exploratory survey that has been conducted in 2008 and 2009 at Nicolas Copernicus University in Toruń (Poland). The target population of this survey was 750 companies found in the database of 2000 Polish of enterprises nominated for "Good Company" Prize, chosen on the base of their profitability and innovativeness. 750 questionnaires were sent to targeted firms and a total of 109 responses were returned. So 109 enterprises, having extended experience in cooperation and at the same time attaining successes in the field of innovativeness, make up the research sample.

The survey, among others, helped to determine the desired benefits that Polish enterprises aspire to obtain within pro-innovative relationships they establish. However, the main research problem was to identify the critical factors fostering the development and success of the relationship. The success of particular relationship was understood as accomplishing all goals set by the partners for this relationship.

According to the research findings, the critical factors fostering the process of pro-innovative relationships development are of internal character and they concern specific features of the relationship. The critical success variables chosen for the research project have been indentified through a comprehensive literature review.

Table 2 presents the hierarchy of identified success factors for pro-innovative relationship development.

Table 2: The impact of identified variables fostering the development of pro-innovative relationships in the opinion of enterprises that are successful at cooperation

Variables fostering successful development of pro-innovative relationships	Very strong positive impact (%)	Mean value
High degree of partners' assets complementarity	76,2	4,59
High level of mutual trust	69,1	4,49
Similarity in partners' goals	69,1	4,45
High level of relationship participants' contribution	57,1	4,34
The ability to define the measures for the outcomes of the relationship	54,8	4,34
Effective communication system	54,8	4,24
Relationship is of strategic importance for both partners	47,6	4,21
Partners' experience in the field of inter-firm cooperation	42,9	4,18
High level of relationship coordination	47,6	4,17
Jointly set and clearly defined measures for the goals accomplished within the relationship	42,9	4,15
High level of infrastructure created for the relationship management	47,6	4,10
High degree of relationship participants' independence	28,6	3,90
High degree of partners' investment in the relationship	38,1	3,83
Long term of relationship existence	23,8	3,73
relationship participants' organizational cultures' similarity	28,6	3,59
Symmetry of relationship participants' contribution	26,2	3,43

During the research a five-point scale (5-very strong positive impact and 1-very weak positive impact on relationship development aimed at goal accomplishment) was used to check the respondents opinions.

The conducted analysis allows to say that the factors of crucial significance for successful pro-innovative relationships development are the following: complementarity of partners' assets, high level of mutual trust which is said to be an essential component of successful

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cooperation, similarity in relationship participants' goals, high level of relationship participants' contribution, the ability to define the measures for the outcomes of the relationship, effective communication system, as well as the fact that relationship is of strategic importance for both partners. All aforementioned factors got the mean value above 4,2 reflecting their strong positive impact on successful relationship development.

The importance of assets complementarity refers to the fact that particular assets of relationship participants' are bounded in a specific way. Moreover, some of engaged assets are changed in order to obtain high complementarity needed for participants' common work. While such situation appears, this strong interdependence becomes an element that holds partners together. Additionally, the more valuable are such assets, the stronger bond exists within the relationship.

According presented research findings, the second critical variable is high level of mutual trust between relationship participants. The nature and importance of trust has been discussed in the theoretical part of the paper. Here it must be noted that if there is high complementarity between relationship participants resources, there is also an increase of trust between them. High degree of resources complementarity entails high degree of partners' good will and commitment to relationship development. On the other hand, high level of mutual trust is necessary to share valuable strategic assets, as for example knowledge, and therefore it fosters the process of learning that is so important in case of pro-innovative cooperation.

Also similarity in relationship participants' goals is an import ant variable that bond cooperating firms. As partners strive after similar benefits and share the vision of cooperation results, they take care of relationship sustainability. Such attitudes are reflected in game theory which says that if players have common goals, they consciously create non-conflict situations. Similarity in cooperation objectives results in the increase of partners commitment but also brings about mutual sens of honesty within the relationship. This in turn holds back cooperating firms from opportunism. In consequence such situation influence the level of partners mutual trust.

High level of relationship participants', contribution is next variable pointed out by the respondents as critical for relationship development and success. It was already said that the higher is value of company' s contribution to common undertaking, the more attention it will put to the use of its resources. This means higher degree of coordination and control over the relationship development.

Another significant issue is cooperators' ability to define the measures for the outcomes of the relationship. It refers to already recognized correctness that the process of trust building accomplishes on the base of cooperation outcomes. Consecutive stages of common partners' activities rewarded with desired benefits result in the increase of relationship participants' mutual trust. Here it should be emphasized that ability to define goals as well as the measures for the outcomes refers to the quality and efficiency of communication within the relationship.

Very important fact is that among mentioned factors there are several connections which create a specific configuration determining not only existence of the relationship but also obtaining consecutive stages of its development. In–depth analysis providing insight into interrelations among critical factors of successful development of pro-innovative relationships first gives the managers of cooperating firms the consciousness of the most important issues

and second the knowledge how to manage and coordinate those variables. We also must remember that all above mentioned factors are of dynamic character which means that the state of the elements is changing in time. Knowledge concerning the impact of mentioned factors upon pro-innovative relationships development enables enterprises intentionally create the conditions favourable their successful development understood as achieving defined goals

5 CONCLUSION

In contemporary changing market circumstances the relationships that a firm builds on the market are its assets which play an important role in strategy building. In the literature on strategic management the view that inter-firm relationships are created to contribute to the increase of cooperating companies' effectiveness (operational dimension) and to improve their competitive positions (strategic dimension) becomes commonly used today. Theoretical part of the paper was an attempt to identify the most significant variables having positive impact on the way pro-innovative inter-firm relationship develops.

The empirical research findings presented in the paper have identified and prioritized the factors critical to successful pro-innovative cooperation undertaken by a group of 109 Polish enterprises. Described data show that high degree of partners' assets complementarity, high level of mutual trust and similarity in relationship participants' goals are the most important in terms of relationship success understood as the ability to accomplish all cooperative goals of the partners. It is important to emphasize that understanding the nature of critical success factors can help enterprises investigate and improve the relationships they build in their environment.

The issues considered in the paper highlights the complexity of analyzed problem but also the need for further research on the matter of: trust development stimulation, relation participants' commitment management or minimizing the opportunism of partners.

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FINANCIAL WELL BEING AND FINANCIAL BEHAVIOUR: A CROSS CULTURAL STUDY (TURKISH AND FRENCH STUDENTS)

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ABSTRACT
Financial well-being can be defined as the percepiton of degree of security in terms of the financial situation a person faces (Norvilitis, Szablicki and Wilson, 2003). Some studies conducted with university students (Davies and Lea, 1995; referenced by Sullivan, 2003) reveals that the indebtedness of students negatively effects their financial well being. As an important financial instrument, credit cards can be obtained easily even by university students without documenting any current or past financial status. Therefore, the feeling of insecurity as a result of the amount of debt might be triggered by the use of credit cards. The aim of this study is to compare Turkish and French university students in terms of their financial well being. For this purpose, financial well being scale developed by Norvilitis, Szablicki and Wilson (2003) is administered to French and Turkish students. Moreover, questions concerning university students' financial behaviours and attitudes, level of indebtedness, credit card usage were asked. As there are cultural, social and economic differences in between these two societies, it is expected that these will be reflected in the financial behaviour of university students. The results showed that there were significant country differences on life satisfaction. Turkish university students had higher scores on life satisfaction than French students. Also results showed that French students were using credit cards significantly more than Turkish students. Moreover, it was observed that financial well being scores of French students were higher than Turkish students. However, Turkish students revelaed that they were getting more support from their families when faced with financial difficulties in comparison to French students.

Keywords: Credit cards, Financial well being, Indebtedness, University students

1 INTRODUCTION

Payment methods and systems evolved over time. As technological advances change the way the transactions are made, also the ability to purchase different goods and services increases as a result of the growth in credit opportunities provided by financial intermediaries. Credit cards are now used elsewhere in the world and provides an easy way of access to credits needed as compared to taking out loans from depository instutions where individuals are subject to fullfill more requirements and paperwork. This infact encourages individuals to spend more or in other words as Feinberg (1986) states people are conditioned to spend. As some studies (Wickramasinghe and Gurugamage, 2009) reveal, this in turn increases the amount of debt households have. Likewise studies (Sotiropoulos and D' Astous, 2012)

conducted in USA shows that the credit card usage rate among students is on the rise and more importantly large rates of bankruptcy is present among young credit card holders. Therefore, the debt created by credit cards might effect the financial well-being of an individual. Financial well-being can be defined as the percepiton of degree of security in terms of the financial situation a person faces (Norvilitis, Szablicki and Wilson, 2003). Some studies conducted with university students (Davies and Lea, 1995) reveals that the indebtedness of students negatively effects their financial well being. As an important financial instrument, credit cards can be obtained easily even by university students without documenting any current or past financial status. Therefore, the feeling of insecurity as a result of the amount of debt might be triggered by the use of credit cards. The aim of this study is to compare Turkish and French university students in terms of their financial well being. For this purpose, financial well being scale developed by Norvilitis, Szablicki and Wilson (2003) is administered to French and Turkish students. Moreover, questions concerning university students' financial behaviours and attitudes, level of indebtedness and frequency of credit card usage were asked.

In addition, the cultural structures of Turkish and French society are different than each other. Turkey is a country that is experiencing an important transition from a rural society to a more urbanized society in the last decades. Therefore both traditional and indiviualistic values can be found together (Kağıtçıbaşı and Sunar, 1992). Also, close ties and family relations are very important for Turkish people. According to Kağıtçıbaşı (1990, 2007), Turkish families living in urban cities tend to raise children who are emotionally dependent to their parents. Besides, high levels of matterial and emotional interdependency can be observed in rural areas of Turkey. Family control is still an important value in Turkey (Kağıtçıbaşı and Sunar, 1992). As a result of this child raising attitude, Turkish kids are more dependent to their parents and are experiencing a high level of support from their families through out their life. In summary, even individualistic values are dominant among highly educated Turkish individuals, Turkish culture has been characterised by collectivistic values (İmamoğlu and Karakitapoğlu-Aygün, 2004). However, individualistic values are more prevalent in French culture. Individualistic cultures like USA and France are composed of individuals who are more self centered (Hofstede, 1981). According to Meyer (2010), when countries are compared with respect to individidiualistic values they posess, France had a score of 71 and Turkey had 37. Indicating that France has a more individualistic society than Turkey has.

As there are cultural, social and economic differences in between these two societies, it is expected that these will be reflected in the financial behaviour of university students. Therefore, we expected that French university students would have higher scores on financial well being. Also we expected Turkish students would receive more support from their families when they face financial hardship.

2 METHOD

2.1 Participants
In this study 70 (55%) Turkish and 57 (45%) French, in total 127 students were participated. The average age of Turkish students were 20.55 (SD= 2.00) and the average age of French students were 22.56 (SD= 2.25). Turkish students were all from various universities in Ankara (Ankara University, Başkent University) the capital city of Turkey. French students were from UFR (Université de Franche – Comté), DUT, Université de Paris, BTS. When average household income levels of the participants were investigated it is found that Turkish students

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had 2409.29 TL (SD= 2234.86) average household income and were getting on average 380 TL (SD= 494.56) support from their families or receiving scholarship on monthly basis. Respectively French students had 2109.64 Euro (SD= 1009.66) average household income and were getting on average 434.66 Euro (SD= 264.91) support from their families or receiving scholarship on monthly basis. Other demographic characteristics are shown in Table 1. Also participants were asked to evaluate their life satisfaction by using a likert type scale (1= No satisfaction at all, 7= Fully Satisfied). The average level of satisfaction was found to be 4.84 (SD= 1.30) among Turkish students and 4.39 (SD= 1.10) among French students. Likewise the frequency of credit card usage were asked to the participants (1= None, 7= A lot), and the average for Turkish students were 1.93 (SD= 2.42) and 4.60 (SD= 2.09) for French students.

Table 1: Demographic characteristics of Turkish and French students

Variables	Turkey	France
	Frequency	
Gender		
Female	44 (% 63)	30 (% 53)
Male	26 (% 37)	27 (% 47)
Mother's Education		
Illiterate	2 (% 3)	
Primary	15 (%21)	
Secondary	9 (%13)	4 (% 7)
Lycee	27 (%39)	16 (% 28)
University	15 (%22)	29 (% 51)
Post Graduate	1 (%1)	8 (% 14)
No Responce	1 (%1)	
Father's Education		
Illiterate	2 (%3)	
Primary	8 (%11)	1 (% 2)
Secondary	9 (%13)	14 (% 25)
Lycee	27 (% 39)	30 (% 53)
University	21 (% 30)	8 (% 14)
Post Graduate	3 (% 4)	4 (% 7)
Credit Card Usage		
Evet	26 (% 37)	49 (% 86)
Hayır	44 (% 63)	8 (% 14)
Number of Credit Cards		
None	40 (% 57)	
1	20 (% 29)	8 (% 14)
2	10 (% 14)	49 (% 86)
Part-time Job		
Working	9 (% 13)	13 (% 23)
Not Working	61 (% 87)	44 (% 77)

2.2   Measures

Demographic information form
In this form participants were asked to answer questions about their gender, age, father's and mother's education level. Also questions concerning their financial status, their family's average income and their personal average income, their attitudes towards using credit cards (number of credit cards, frequency of usage, amount of expenditure made by using credit

cards and etc.) were asked. Besides, their perception of life satisfaction was measured on a seven point Likert-type scale ranginig from not at all satisfied (1) to very satisfied (7).

Financial well being scale
This scale developed by Norvilitis, Szablicki and Wilson (2003) to measure individual financial confidence and financial well being. The scale has two sub-scales: current financial status (8 items, e.g. i am concerned about repaying my credit card debt, e.g. i think i will not have any credit card debt a year later) and expected future financial status (2 items). According to Norvilitis et al. (2003), single total score from the scale can be obtained. The scale is adapted to Turkish culture by Sunal (2012). In the adaptation study to examine the construct validity, factor analysis were made and consistent with the original scale two sub-scales were obtained. In this scale, some of the items were excluded as these items were thought to be irrelevant to the Fernch culture (e.g. i am concerned about repaying my student loan is excluded). Therefore, a six item scale was administered. Items 2 and 6 are reversly coded. In this study, total score was used. In this study internal consistency coefficient Cronbach's Alpha was 0.79.

2.3   Procedure
The purpose of this study was explained to the participants and then scales were given to them. Participation was voluntary and their answers were kept anaontmously. The application of scales took 10-15 minutes. The scales were administered to Turkish students in classroms and to French students via internet.

3   RESULTS
A one –way multivariate analysis of variance (MANCOVA), using income level as covariant, was conducted to compare financial well being, life satisfaction, credit card usage frequency, and level of support from family received when financial difficulties were faced among Turkish and Fench university students. Significant differences were found between Turkish and French university students on financial attitudes, Wilks'Lambda= .72, F (5, 118)= 9.01, p<.001, eta^2 = .28.

The results showed that there were significant country differences on life satisfaction, F (1, 122)= 3.05, p<.05, eta^2 = .02, credit card usage frequency, F (1, 122)= 38.83, p<.001, eta^2 = .24, support from family during financial difficulties, F (1, 122)= 5.21, p<.05, eta^2 = .04 and financial well being, F (1, 122)= 4.54, p<.05, eta^2 = .03. Turkish university students had higher scores on life satisfaction than French students (Table 2). When groups were compared according to the frequency of credit card usage it was found out that French students were using credit cards significantly more than Turkish students. Moreover, it was observed that financial well being scores of French students were higher than Turkish students. However, Turkish students revelaed that they were getting more support from their families when faced with financial difficulties in comparison to French students.

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Table 2: Descriptive statistics of finansical attitudes by gender and countrye and F values

Country	Gender	Life Satisfaction		Credit card usage frequency		Support Received from family		Financial well being	
		M	SD	M	SD	M	SD	M	SD
Turkey	Female (n= 44)	4.93	1.17	1.64	2.30	6.07	1.74	13.80	4.63
	Male (n= 26)	4.70	1.50	2.42	2.60	5.85	1.90	13.34	4.84
	Total (N=70)	4.84	1.30	1.92	2.42	5.99	1.79	13.62	4.68
France	Female (n=30)	4.23	1.07	4.63	2.30	5.10	1.40	15.30	5.31
	Male (n=27)	4.55	1.12	4.55	1.89	5.44	1.05	15.70	4.24
	Total (N= 57)	4.39	1.10	4.60	2.10	5.26	1.25	15.50	4.80
F		3.05*		38.83**		5.21*		4.54*	
Total	Female (n=74)	4.65	1.17	2.85	2.72	5.67	1.67	14.40	4.95
	Male (n= 53)	4.62	1.30	3.50	2.48	5.64	1.52	14.55	4.66
	Total (N= 127)	4.64	1.22	3.13	2.63	5.66	1.60	14.46	4.81
F		.04		.73		.05		.00	

* p< .05   ** p<.001

4   DISCUSSION

The aim of this study is to compare Turkish and French students in terms of their financial attitudes. Findings are consistent with the expectations. Findings showed that French students are financially better off than Turkish counterparts as France is a wealthier country than Turkey when compared in terms of GDP per capita. The nominal GDP per capita in France was 44.007 $ in 2011 and 10.363 $ in Turkey (IMF, 2012). In this study the average household income of Turkish students were 1020 € (2.409 TL) and average household income of French students were 2.109 €. This result is consistent with our expectations though according to the national average nominal income per capitas, we would expect French students' average household income to be four times higher than Turkish ones. Though it was only two times higher in this study. One possible reason is that some of the Turkish participants were from a private university in Ankara therefore their average household income might be higher which possibly do not reflect the Turkish national average income and this might have raised the average. The second possible reason is that families that can afford to send their children to universities might have on average a higher household income level than the national average in Turkey.

Findings also revelaed that, Turkish students are significantly getting more support from their families when faced by financial problems. This is also consistent with our expectations as Turkish culture is more tarditional and children are more dependent to their parents. In individualistic societies emotional and matterial dependence are at the lowest levels (Kağıtçıbaşı, 1990, 2007). Therefore French students might be relying less on their parents when financial difficulties are faced.

Moreover, credit card usage among French students were significantly more than Turkish students according to the results obtained. There might be a couple of possible reasons beyond this fact. First of all France is a wealthier country than Turkey is. Therefore, access to credit cards might be more easier for French students than Turkish students. More importantly, 57% of Turkish participants had no credit cards where as 86% of French students had two credit cards. Therefore, French students use credit cards significantly more than Turkish students cause they posess more credit cards. Likewise in USA –another much

wealthier country than Turkey-, according to SallieMae (2009), students posess on average 4.6 credit cards.

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THE CAUSALITY RELATIONSHIPS BETWEEN FDI AND R&D IN EUROPEAN UNION

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ABSTRACT
Technological development and R&D activities are accepted as one of the factors of basic production in endogenous growth theories. There has been an increasing interest towards R&D on the level of both firm and country. Moreover countries regard FDI as an important element which increase R&D activities. Although there are numerous studies which investigate relationship of both FDI and R&D on macroeconomic variables such as economic growth, employment and export; the number of studies which investigate the relationship between FDI and R&D is quite few. The aim of this study is to analyze relationships between FDI and R&D in the example of EU15 and EU27. For this aim, 1996–2009 period data of mentioned countries were considered and dynamic panel causality testing was done. According to the findings obtained from empirical test made in the study, there is one-way causality relationship among EU15 and EU 27 countries from FDI towards R&D. This finding points out to the existence of complementary relationship between FDI's and R&D for EU.

Keywords: European Union, FDI, Panel Causality, R&D

1 INTRODUCTION

Neoclassical growth theory which was developed under the leadership of Solow (1956) resulted in balanced growth. In the case of balanced growth, output per worker increases as much as technological development. Technological development which is accepted as exogenous in theory is a factor which determines increase in output per worker. However, in the endogenous growth theories which are developed under the leadership of Romer (1986), technological development is determined by intrasystem elements. The theory concluded that a growth rate could be achieved which is above balanced growth rate that was achieved by

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neoclassical theory. Technological development which is based on research and development (R&D) activities was regarded as an important factor in the increase of growth[1].

Technology transfer may have positive effects on economic growth. Foreign direct investment (FDI) may increase economic growth through technology channels such as R&D by contributing to the current technological knowledge. Also, FDI investors may contribute to more efficient usage of resources by getting into competitive environment with domestic firms in domestic market. Domestic firms may carry out R&D activities in order to compete with technology brought by foreign investors. On the other hand, in some cases firms can have the new technology without doing any R&D activities.

Today countries make competition in order to attract FDI investments. Forming an economic integration or accession to an integration is conducted in order to attract FDI. EU which is the most successful example of integration is in an important position for FDI investments. The aim of this study is to analyze relationships between FDI and R&D for EU with panel causality testing. Literature which analyzed FDI and R&D relationship was included in the second section of study. In the third section, econometric method and data set was discussed. In the fourth section, findings obtained as a result of analysis were given. A general evaluation of findings was made in the last section.

2   THEORY AND LITERATURE SUMMARY

Although there are numerous studies which investigate relationship of both FDI and R&D on macroeconomic variables such as economic growth, production, efficiency, export, employment etc.; the number of studies which investigate the relationship between FDI and R&D is quite few. An exact judgment cannot be made about relationship between FDI and R&D according to the results of this restricted number of studies. While some of the studies assert that there is a positive, complementary relationship between these two variables; some studies assert that there is a negative, substitution relationship between these mentioned variables.

According to the studies which assert that there is a positive relationship between FDI and R&D, FDI creates positive externality on domestic firms through technological spillover effect. That is; foreign firms which enter in a country with FDI may have direct or indirect contribution to R&D activities of the host country. For example, foreign firms pay attention to increasing R&D activities of host country in order to adapt economic conditions of host country or to compete with domestic firms. Similarly, existence of foreign firms in the sector can force domestic firms to develop new innovations and increase their technological capacity. Moreover, foreign firms stepping into country can create technological spillover effects on behalf of domestic firms and cause increase in R&D activities of these firms (Sasidharan and Kathuria, 2011, p. 1226).

According to the studies which assert that there is a negative relationship between FDI and R&D, firms may choose to procure technology instead of doing R&D activities as a result of FDI inflow (Lee, 1996, p. 198). That is; domestic firms may decrease their R&D activities by procuring technology from abroad instead of competing with foreign firms. Sometimes firms stepping into foreign country prefer using technology of partner company and decide not to

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[1] See Romer (1990), Rivera-Batiz and Romer (1991a, 1991b), Grosmann and Helpman (1991), Aghion and Howitt (1992).

make R&D investment (Sasidharan and Kathuria, 2011, p. 1226). Then, FDI and R&D will become competitors instead of complements.

In the following section, specific studies which analyze relationships between FDI and R&D in literature were presented according to the year of analysis. Literature summary which is composed of these explanations is shown in Table 1.

Kumar (1987) analyzed relationship between technology import and R&D expenditures of 1334 firms in manufacturing industry in India for 1967–1977 and 1980–1981 periods with panel OLS method. According to the findings obtained from study, FDI inflows have reducing effect on domestic R&D expenditure.

Bertschek (1995) analyzed on 1270 German firms for 1984–1988 periods that import and FDI have no positive effect on innovative activities of domestic firms. In his analysis, Bertscheck (1995) used Chamberlain's random effects probit approach (1984) and determined that import and FDI have positive effect on both product innovations and process innovations.

Lee (1996) analyzed relationship between technology import (as an indicator of FDI) and R&D in manufacturing industry firms in Korea for the year 1884 with the help of Heckman two-stage estimation procedure (1979). In the first stage of procedure he applies Probit analysis by using all the firms (492 firms) in the sample and determined that firms which import technology have tendency of increasing their R&D activities. In the second stage of analysis, panel OLS was applied on firms which have R&D institutes (92 firms) and it was determined that there is no complementary relationship between FDI and R&D, on the contrary FDI have negative effects on international inventive activities.

Chuang and Lin (1999) analyzed relationship between FDI and R&D with the help of Heckman two stage estimation procedure (1976) by using 8846 firms in Taiwan for the year 1991. Probit model estimation was done in the first stage of econometric analysis and it was determined that FDI has increasing effect on R&D activities. In the second stage panel OLS method was applied for 679 firms which make R&D investment. It was determined that there is negative relationship between FDI and R&D investments.

Branstetter (2000) analyzed changes in R&D activities of Japanese firms which make FDI investments in USA. In the study panel OLS was applied on 208 Japanese and 209 American firms for 1986–1989 period and it was determined that there is a positive but weak relationship between FDI and R&D activities.

Fan and Hu (2007) investigated effects of FDI on domestic R&D activities on 998 firms in China for 1998–2000 period. In the study in which Panel OLS and Fixed Effects Models were used as econometric method, it was concluded that FDI inflows have negative effect on R&D activities. Fan and Hu (2007) stated that firms with more foreign participation allocate less resource for R&D activities.

Kathuria (2008) investigated what kind of changes FDI inflow for domestic firms in India (high and medium technology industries) had on R&D expenditures. In the study in which post 1991 period when corporatization reform was done is divided into two sub-periods; Probit model was used in the first sub-period which is covers the years 1994–1996. According to the findings obtained from estimation of Probit model it was determined that increase in

FDI decreases R&D expenditures. Tobit model was used in the second sub-period which is covers the years 1999–2001; it was concluded that there is no causality relationship between FDI inflow and R&D expenditures.

Like Kathuria (2008; referenced by Sasidharan and Kathuria, 2011) analyzed the relationship between FDI and R&D in India for post-corporatization period with the help of Heckman's two-stage estimation method (1979). In the study in which 1843 firms which go into operation in manufacturing industry sector for 1994–2005 period were analyzed, first of all panel OLS estimation was done without making discrimination among firms. According to the findings obtained from this estimation, it was determined that FDI has no significant effect on R&D. Similar results were obtained when panel OLS analysis was done by grouping firms as high, medium and low technology firms. Finally when firms were divided according to stock ownership (as majority and minority owned foreign firm) and analyzed in this way, it was determined that there is positive relationship between FDI and R&D.

Table 1: Literature Summary about Relationship between FDI and R&D

Author	Period	Country	Method	Applied Findings
Kumar (1987)	1976–1977 1980–1981	India (1334 firms)	Panel OLS	FDI→R&D (-)
Bertschek (1995)	1984–1988	Germany (1270 firms)	Chamberlain's Random Effect Probit Model	FDI→Product innovations (+) FDI→ Process innovations (+)
Lee (1996)	1984	Korea (1. stage 492 firms, 2. stage 92 firms)	Heckman (1979)'s two stage estimation	FDI→R&D (-)
Chuang and Lin (1999)	1991	Taiwan (1. stage 8846 firms, 2. stage 679 firms)	Heckman (1976)'s two stage estimation	FDI→R&D (-)
Branstetter (2000)	1986–1989	Japan (208 firms) and USA (209 firms)	Panel OLS	FDI→R&D (+)
Fan and Hu (2007)	1998–2000	China (998 firms)	Panel OLS and Fixed Effect Model	FDI→R&D (-)
Kathuria (2008)	1994–1996 1999–2001	India (190 firms)	Probit and Tobit model Estimation	• Probit: FDI→R&D (-) • Tobit: FDI↔R&D (0)
Sasidharan and Kathuria (2011)	1994–2005	India (1843 firms)	Heckman (1979)'s two stage estimation	• Full Sample: FDI↔R&D (0) • Technology discrimination: FDI↔R&D (0) • Majority- and minority-owned discrimination: FDI→R&D (+)

Note: Table was formed by authors; (+) reflects positive, (-) negative, (0) meaningless effects in the table, (↔) and (→) symbols respectively point out to the existence of two-way an done-way causality relationships between variables.

3   METHOD AND DATA

In the literature study it was seen that all the studies were based on data at firm level. Publishing of R&D data of countries in database recently and developments in econometric

methods enables testing of relationship between FDI and R&D. Therefore, in this study panel data analyses which pay attention countries different from available literature was included.

In the study relationships between FDI and R&D was analyzed for EU 15 and EU 27 countries. As an indicator of R&D and FDI for mentioned country groups, shares of R&D expenditures and FDI in GDP were used respectively. The data were compiled from the World Bank's Development Indicators online database, available on http://www.worldbank.org. The panel covers annual data for the period 1996–2009. The data set of the study is unbalanced.

For determination of causality relationships between FDI and R&D in EU 15 and EU 27 countries, the method developed by Holtz-Eakin, Newey and Rosen (1988) was used. This method can be explained through a VAR system formulated as follows:

$$Y_{it} = \alpha_{0t} + \sum_{l=1}^{m} \alpha_{jt} Y_{it-l} + \sum_{l=1}^{m} \beta_{jt} X_{it-l} + \emptyset f_{yi} + u_{it} \tag{1}$$

$$X_{it} = \varphi_{0t} + \sum_{l=1}^{m} \varphi_{jt} X_{it-l} + \sum_{l=1}^{m} \mu_{jt} Y_{it-l} + \tau f_{xi} + \varepsilon_{it} \qquad (i = 1, \dots, N; t = 1, \dots, T) \tag{2}$$

Here Y represents R&D; X denotes FDI; i is the number of the cross-section units from 1 to N; t is the time period from 1 to T; f_{yi} and f_{xi} refer to the time-invariant fixed effects unique to cross-section units. This fixed effects of cross-section units were eliminated by taking difference of the equations (1) and (2) so these equations were turned to equations (3) and (4) as follows[2]:

$$\Delta Y_{it} = \sum_{l=1}^{m} \alpha_j \Delta Y_{it-l} + \sum_{l=1}^{m} \beta_j \Delta X_{it-l} + \Delta u_{it} \tag{3}$$

$$\Delta X_{it} = \sum_{l=1}^{m} \varphi_j \Delta X_{it-l} + \sum_{l=1}^{m} \mu_j \Delta Y_{it-l} + \Delta \varepsilon_{it} \qquad i = 1, \dots, N; \ t = 1, \dots, T; \ l = 1,2 \tag{4}$$

Since error terms in equations (3) and (4) can be related with lags of dependent variable; instrumental variables should be used in the estimations. Therefore, the equations (3) and (4) were estimated by using the Generalized Method of Moment (GMM). The direction of causality in GMM estimations were determined by Wald statistics obtained by evanishing independent variables as a group.

On the other hand, it was decided with Sargan test whether instrumental variables used in GMM estimations are valid or not (Liang and Liang, 2009, p. 152).

4   FINDINGS
Causality results were determined by Wald test for independent variables obtained from GMM estimation of equations (3) and (4) for EU 15 and EU 27 are presented in Table 2. On

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[2] Δ represents difference operator.

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the other hand, the results of GMM estimation of equations (3) and (4) are given in the Appendix.

Table 2: Results for Panel Causality Test

	Equations	Wald Test χ2 Statics	Sargan Test P-Value	Directions of Causality	
EU 15	$$\Delta R\&D_{it} = \sum_{l=1}^{m} \alpha_j \Delta R\&D_{it-l} + \sum_{l=1}^{m} \beta_j \Delta FDI_{it-l} + \Delta u_{it}$$	6.62022[b]	0.32090	FDI ⟹	R&D
	$$\Delta FDI_{it} = \sum_{l=1}^{m} \alpha_j \Delta FDI_{it-l} + \sum_{l=1}^{m} \beta_j \Delta R\&D_{it-l} + \Delta \varepsilon_{it}$$	3.29655	0.29297	FDI ⟹̸	R&D
EU 27	$$\Delta R\&D_{it} = \sum_{l=1}^{m} \alpha_j \Delta R\&D_{it-l} + \sum_{l=1}^{m} \beta_j \Delta FDI_{it-l} + \Delta u_{it}$$	7.81654[b]	0.39797	FDI ⟹	R&D
	$$\Delta FDI_{it} = \sum_{l=1}^{m} \alpha_j \Delta FDI_{it-l} + \sum_{l=1}^{m} \beta_j \Delta R\&D_{it-l} + \Delta \varepsilon_{it}$$	2.70283	0.33244	FDI ⟹̸	R&D

Notes: b is meaningful at %5 significance level. Lags of dependent and independent variables were taken as 2 in the GMM estimations. Instrumental variables used in the GMM estimations are lags of level values of dependent and independent variables from 2 to 5. Δ represents difference operator.

As it is seen in Table 2, Wald statistics is meaningful both for EU 15 and EU 27 in the estimations of the equations where R&D is dependent variable. This result points out one-way causality relationship from FDI to R&D. According to the estimation results presented in the appendix, the FDI coefficients have positive signs which means that FDI have positive effect on R&D. Small values of the coefficients can be interpreted as weak relationship. The coefficients of the estimations made for EU 15 being higher than EU 27 means that relationship is more powerful in the sense of EU 15. Moreover, significance levels of sargan test put forward that instrumental variables used in the GMM estimations are valid.

5   CONCLUDING REMARKS

Endogenous growth theories have been put forward in 1980's. Technological development, R&D, human capital, background information and distribution have reached basic factors of production together with endogenous growth theories. Therefore, technological development and R&D activities becoming an important determinant in competitiveness of firms and growth of national economy resulted in increase of investments towards these in the level of both firm and country.

Increasing importance of R&D activities impelled countries towards different strategies for increasing R&D activities. In this sense, many countries regard FDI as an important factor which increases R&D activities. For example, FDIs may have important contributions to R&D activities in host country through technology transfer and spillover effects. Moreover, foreign firms which get into national economy with FDIs enable usage of resources more efficiently by increasing competitiveness environment in the country. Competitiveness which increases due to foreign firms impel domestic firms to carry out more R&D activities. FDI can also have negative effects apart from positive ones which contribute to national economy and R&D activities. For example, domestic firms may not enter into competition with FDIs and prefer purchasing manufacturing technology and therefore cause national R&D

investments to decrease. Similarly, foreign firms which make investments in the country prefer using technology of partner company and decide not to make R&D activities.

Liberalization of international capital mobility and globalization of financial markets in recent years resulted in increase of interest towards FDIs which are thought to have contribution in R&D activities. Especially developing countries regard FDIs as an important tool both in meeting their technological deficits and increasing R&D activities. Today countries evaluate economic integration as an alternative in attracting more FDI. More clearly, economic integrations result in scale economy with expanding market opportunities and causes increase of FDI inflows of countries both within and out of integration.

This study aims to put forward the kind of relationship between FDI and R&D and EU which is accepted as the most advanced integration. In this sense, it was analyzed through dynamic panel causality test whether FDI and R&D are complement or substitute of each other in EU 15 and EU 27. According to panel causality tests, while there was no relationship from R&D variable towards FDI variable both for EU 15 and EU 27; there was one way and statistically meaningful causality relationship from FDI towards R&D. That the coefficients of related FDI variables have positive signs can be interpreted as that there is a complementary relationship between FDI and R&D in the sense of EU. However, small values of these estimation coefficients points out to weak complementary relationship between FDI and R&D. On the other hand, Coefficients of estimations made for EU 15 being higher than EU 27 means that relationship is more powerful in the sense of EU 15. Recent developments in 2004 and 2007 which include transition economies (apart from Malta and Cyprus) and inclusion of small countries in EU both in the sense of population and economy can be effective in these findings.

As a result findings put forward positive and one-way causality relation from FDI to R&D in EU countries. FDI made in EU countries have positive effects on R&D activities in these countries. This study may have contribution to literature in the sense of future researches for applying different econometric methods on various country groups.

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APPENDIX

Appendix 1: Results for Panel Causality Test

Independent Variables	Dependent Variables			
	EU 15		EU 27	
	ΔRD	ΔFDI	ΔRD	ΔFDI
ΔRD(-1)	0.98752[a]	-1.62323	1.11264[a]	24.93975
ΔRD(-2)	-0.08050	-9.02578	-0.15797	-18.59077
ΔFDI(-1)	0.00093	-0.22895	0.00070	0.45957
ΔFDI(-2)	0.00351[b]	0.24564	0.00269[b]	0.59864[c]
Wald Test $\chi 2$ Statics	6.62022[b]	3.29655	7.81654[b]	2.70283
Sargan P-Value	0.32090	0.29297	0.39797	0.33244

Notes: a, b and c, respectively, is meaningful at %1, %5 and %10 significance level. Δ represents difference operator.

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EXPLORING THE EFFECT OF NATIONAL CULTURE ON CORPORATE ENVIRONMENTAL PROACTIVITY

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ABSTRACT
The aim of the paper is to analyze if and in which way the national culture acts as a driver toward the implementation of corporate environmental strategy. An environmental proactive strategy seeks to reduce environmental impact and manage the interface between business and the nature beyond imposed compliance. It is recognized that the introduction of environmental protection can be used to develop successful strategy to reach a competitive advantage. The Organization and the natural environment literature identify several drivers able to push toward ecological engagement. One of the most important is the ethical attitude of organizations. Ethics could vary among different organizations because of different circumstance; in particular ethical values are strictly embedded to culture. The most of literature focused the analysis on the broader issue of Corporate Social Responsibility, analyzing the effect of national culture on Corporate Social Performance. Conversely, only few studies have analyzed the relationship that occurs between the national culture and the environmental proactivity, employing national environmental indicator rather than firms' performance scores. Previous studies, which used Hofstede's framework, have found out that the national culture is able to influence the overall national environmental performances, missing to analyze cultural impact on company's environmental behaviour. Does the national culture influence the company's attitude to implement a proactive environmental strategy? Which cultural dimension is able to represent this pressure? The study is based on a quantitative analysis aimed at statistically measuring how national culture could influence corporate environmental proactivity, measured using the CDP Global 500 report.

Keywords: *Cross-cultural management, Environmental performance, National culture values, Organization and natural environment*

1 INTRODUCTION
The trade-off existing between the goals of achieving an high and sustainable economic growth and to keep an high environmental standard is nothing new.

At organization level, the environmental protection has become an important issue since pollution and natural resources' depletion represent a wide source of costs. Companies may play a significant role in the reduction of man activities' impact on natural environment also promoting a world more ecologically sustainable.

During the last years the Organization and Natural Environment (ONE) stream of research focused the attention on the linkage existing among environmental protection, business management and strategy. According to some researchers (Hass, 1996; Kolk and Mauser, 2002) this attitude can increase by the time, following an ideal path toward sustainability (Hunt and Auster, 1990; Roome, 1992; Hart, 1995; Ghobadian et al., 1998).

The proactive environmental strategy ideally represents the last stage of environmental effort into management practices (Hunt and Aster, 1990). It is defined as the one that seeks to

reduce the environmental impact and to manage the interface between business and the nature beyond imposed compliance (Sharma, 2000; Aragon - Correa and Sharma, 2003).

It is characterised by the presence of four basic elements (Delmas et al., 2011): a environmental reporting; b operational improvements; c organisational changes; d regulatory proactivity. According to some researcher, the introduction of environmental protection at firm level could be used to develop successful strategy to reach a competitive advantage. The reduction of inefficiencies and the rationalization in the use of natural resources are important sources of cost reduction, as the environmental attributes of products and services (Orsato, 2006; Porter and Van der Linde, 1995) are used for marketing differentiation.

Several researches rather have tried to identify, analyse and classify the drivers that may encourage a company to develop and sustain its environmental engagement. Environmental regulations and stakeholder pressure are considered the external drivers, while company's characteristics are the internal ones.

One of the most important factor able to affect company's environmental engagement and the implementation of environmental strategy is the level of ethical attitude.

Infact, in presence of a strong ethical motivations, related with the 'right thing to do' environmental protection become an important matter into organisations.

Ethics is related to values, strictly embedded with both national and organizational culture.
In particular, national culture has been defined as ''…patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups'' (Kroeber and Kluckhohn, 1952, p. 13).

The culture shapes the orientation of individuals to take sustainable initiatives and to translate these engagement at firm level.

The most of literature focuses on the effects of the cultural values on the broader issue of Corporate Social Responsibility (Ho et al., 2012; Parboteeah, 2012; Ringov and Zollo, 2007), only few studies have specifically analyzed the relationship that occurs between the national culture and the corporate environmental engagement. In particular, these studies (Park et al., 2007; Husted, 2005), employ national environmental indicators, without focus on this connection at organization level.

In order to cover the gap of existing literature, has been formulated the following research question:
RQ: Does the country's national culture affects the company's environmental proactivity?
The paper is articulated as follows: the first section presents the theoretical background highlighting the main literature on the topic and it develops the hypotheses; section 2 describes the dataset and variables; section 3 presents the result of the analysis. Lastly, in the section 4 are presented the implications of results and the conclusions.

2   LITERATURE REVIEW AND HYPOTHESES
Cross-cultural studies have analyzed the influence that national culture exerts on company's social responsibility from different viewpoints employing as their basis Hofstede's (Husted,

2005; Park et al., 2007; Ringov and Zollo, 2007; Ho et al., 2012) or GLOBE (Ringov and Zollo, 2007; Parboteeah et al., 2012) cultural dimensions.

Despite previous analysis used different models, they assumed that the different sets of values, beliefs, attitude and moral, rooted in the national culture drive individuals on their choices and actions. Therefore, national culture is strictly embedded at the corporate social or environmental behaviours and some cultural dimensions are more likely to support these initiatives than the others.

In order to understand how the national culture affects on the corporate environmental engagement and then their ability to implement a proactive environmental strategies, this paper considers Hofstede's cultural dimensions.

According to Hofstede, culture can be defined as "a collective programming of the mind which distinguishes one group from another" (Hofstede, 1980, p. 25).

From a deep survey to about 60,000 people from over 50 countries, he identified cultural values that distinguish countries from each others, grouping them into four clusters (even if other two dimensions has been added afterwards), called dimensions of national culture (Hofstede, 1980, 2001):
- Power Distance (PD): it refers to the tolerance of unequal distribution of power;
- Individualism/Collectivism (IDV): it expresses the degree of individuals to take care of themselves or to feel a part of a group and take care of its members.
- Masculinity/Femininity (MAS): it is related to individuals' concern of achievement, assertiveness, competition. On the other side, femininity into society is related to the focus of life's quality and interpersonal cooperation;
- Uncertainty Avoidance (UA): it is the extent to which individuals in nations tolerate ambiguity in their lives and are willing to take risks.

Employing these cultural dimensions as their basis, previous research found out that in the presence of high level of Power Distance and Masculinty into society is linked to lower environmental performance (Park, Russel and Lee, 2007) and institutional capacity of a country for environmental sustainability (Husted, 2005). Regarding to Corporate Social Performance, Ringov and Zollo (2007) found out that in a presence of high Power Distance and Masculinity is related with lower CSP performance, while Ho et al. (2012) achieved opposite results.

The degree of Individualism into society has been hypothesized to be negatively related to environmental performance and overall responsibility behavior. Previous scholars were not agree about the effect of Uncertainty Avoidance on firms' environmental performance. According to Ringov and Zollo (2007) and Husted (2005), firms based in country with high level of risk avoidance should show lower environmental or sustainability performance in cause of the small willing to invest into innovative activity, often not related to computable returns.

Empirical results of such studies did not support this assumption. On the contrary, according to Park, Russel and Lee (2007), in presence of an high degree of Uncertainty Avoidance, firms try to find environmental solutions, as individuals feel threatened by uncontrollable risk posed by nature. They should put greater effort to reduce these risks than individuals from

low risk avoidance countries do. Also in this case, any empirical result has been found. Also Ho et al. (2012) showed that countries with higher UA exhibit higher corporate social performance.

Considering the previous researches the following hypotheses have been formulated:
H1: the firms based in higher Power Distance countries show a worsen level of environmental performance
H2: The firms based in Individualistic countries show a worsen level of environmental performance
H3: The firms based in Masculine countries show a worsen level of environmental performance
H4:The firms based in higher Uncertainty Avoidance countries show an higher level of environmental performance

Despite the existing studies did not do this, the paper also considers the fifth Hofstede's cultural dimension, namely the Long Term Orientation, initially called Confucian dynamism. It refers to individual's propensity to save for the future and his ability to change tradition to changing conditions. For this reason is reasonable to think that in a presence of high level of LTO, individuals try to consider environmental engagement as an important matters.
Then the last hypothesis is:

H5: The firms based in a country featured with an high level of Long Term orientation, show an higher level of environmental performance

3   DATA AND MEASURES

3.1   Dependent variable
The analysis is concentrated on the evaluation of national cultural's effect on environmental practivity rather than environmental performance.

Considering the complexity of the definition of environmental proactivity, to find an effective indicator able to measure it is not an easy task.

Christimann (2000) has already revealed that data on firms' environmental practices and the cost reduction due to the implementation of green practices are not avaible from public and global database.

Previous ONE's research used qualitative measures based on mail surveys of a specific samples of companies, environmental indicators provided by institutional agencies; some other used the presence of EMS as a measures of proactivity.

Consistent with the definition provided by Delmas et al. (2011), the measure of environmental disclosure is considered a proxy of environmental proactivity.

For this reason, the paper employs as dependent variable the company's carbon disclosure score (CDS), measured by Carbon discosure project (CDP).

Every year, CDP asks to the Global 500 companies to measure and report what climate change means for their business. During the 2011, 81% (404) of corporations answered to the

CDP questionnaire. A score (from 0 to 100) is applied to most of the company responses to CDP, which are assessed for disclosure and performance.

Low CDS (< 50) indicates limited or restricted ability to measure and disclose risks and opportunities that came from carbon emissions. The companies which gain this score show a compliance attitude towards environmental -or more precisely carbon- problems. It does not indicate poor performance but a low score is assigned to companies that provide insufficient information to evaluate performance and could be considered inactive to climate change. Vice-versa high CDS (>70) indicates a more deep involvement into climate change issue: companies identify into climate change management a tool to reach a strategic advantage.

In this companies "senior management understand the business issues related to climate change and are building climate related risks and opportunities into core business" (CDP, 2011, p. 22).

Moreover, the carbon disclosure project grouped all companies with the highest disclosure score (more than 50) with a performance bands:A, A-, B, C, D and E. All the score and bands simply recognize the evidence in action.

3.2 Explanatory variables
This research focalizes the attention on the role of national culture into shape company's environmental engagement. Considering the most of literature, 5 different cultural dimension developed by Hofstede (1980) are employed:
- Power Distance (PD)
- Individualism (IND)
- Uncertainty Avoidance (UA)
- Masculinity (MAS)
- Long-term Orientation (LTO)

3.3 Control variables
In order to confirm the relationship between national cultural dimension and company's environmental proactivity, control variables which could have a strong impact on company's environmental engagement are introduced.

The selected three variables had been identified by the extant literature as relevant drivers for firms' environmental proactivity. These are: company's revenues as proxies of firm's dimension (Benito and Benito, 2006); company's age (Hass, 1996; Kolk and Mauser, 2002), as usually environmental orientation increases by the time and R&D expenditures. Data have been collected from Businessweek (2011).

3.4 Analysis
To test the hypotheses it is used IBM SPSS Statistic software. The raw sample included 500 companies contacted by CDP report. A screen of the sample has been then developed, in order to evaluate the presence and the availability of the necessary data. The final sample includes only those companies that responded to CDP's questionnaire and that distinctly belong to a specific country.

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Final sample is then composed by 368 companies from 30 different countries[1] and operated in 9 different industries (See Table 1).

Table 1: Industry composition of the final sample

	Frequency	%	Cumulative %
CONSUMER DISCRETIONARY	44	12,0	12,0
ENERGY	38	10,3	22,3
FINANCIAL	84	22,8	45,1
HEALTH CARE	29	7,9	53,0
INDUSTRIAL	37	10,1	63,0
INFORMATION TECHNOLOGY	29	7,9	70,9
MATERIALS	37	10,1	81,0
UTILITIES	18	4,9	85,9
CONSUMER STAPLES	29	7,9	93,8
NOT SPECIFIED	23	6,3	100,0
TOTAL	368	100,0	

The ANOVA reveals no differences among national cultural dimension in different industries (Table 2). Conversely, ANOVA reveals a significant effect of industry on CDS (F=1,699; *p-value*< ,10), Revenues (F=3,266; <, 01); R&D expenditure (F=4,619; *p-value* <,01), and Longevity(F=4,885; *p-value* <, 01),

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[1] Australia, Brazil, Canada,China, Colombia, Czech Republic, Denmark, Finland, France, Hong Kong, Germany, India, Israel, Italy, Japan, Malaysia, Netherland, Norway, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Kingdom, USA.

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Table 2: ANOVA's results

Dimension	Sum of squares	Df	Mean square	F	P-Value
PD					
Between groups	2642,862	9	293,651	1,027	,418
Within groups	102359,214	358	285,920		
Total	105002,076	367			
IND					
Between groups	4458,417	9	495,380	0,781	,634
Within groups	227178,059	358	634,576		
Total	231636,476	367			
UA					
Between groups	1834,195	9	203,799	0,771	,644
Within groups	94657,240	358	264,406		
Total	96491,435	367			
MASC					
Between groups	3178,509	9	353,168	,851	,569
Within groups	148485,010	358	414,763		
Total	151663,519	367			
LTO					
Between groups	6531,724	9	725,747	1,167	,315
Within groups	222681,752	358	622,016		
Total	229213,476	367			
CDS					
Between groups	5013,717	9	557,080	1,669	,095*
Within groups	119491,324	358	333,775		
Total	124505,041	367			
REVENUES 2011					
Between groups	7,3559E+22	9	8,173E+21	3,266	,001***
Within groups	8,959E+23	358	2,503E+21		
Total	9,6946E+23	367			
LONGEVITY					
Between groups	122382,619	9	13598,069	4,885	,000***
Within groups	996446,588	358	2783,370		
Total	1118829,207	367			
R&D 2011					
Between groups	1,6847E+20	7	2,407E+19	4,619	,000***
Within groups	4,5854E+20	88	5,211E+18		
Total	6,2701E+20	95			

Note: *. p< 0,1 ; **. p< 0,05; **. ***p< 0,01

Then, the bivariate correlation among variables is calculated (Table 3). As many cross-cultural studies have highlighted, the cultural dimensions are highly correlated each others. The Carbon disclosure score is positively correlated with the level of Uncertainty Avoidance (0,198, *p-value* < 0,01), firm size (0,140; *p-value* < 0,01), company's longevity (0,129; *p-value* < 0,05) and R&D expenditures (0,293; *p-value* < 0,01).

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Table 3: Correlations and descriptive statistics

	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) PD	49,10	16,91	1,00	-,753**	-,139**	,318**	,321**	0,06	0,05	-0,04	0,13
(2) IND	68,74	25,12		1,00	,138**	-,333**	-,526**	-0,07	-0,06	0,05	-0,16
(3) UA	58,32	16,21			1,00	,134**	,281**	,198**	0,03	-0,04	-0,05
(4) MASC	55,18	20,33				1,00	,111*	0,03	-0,01	-0,09	-0,01
(5) LTO	38,24	24,99					1,00	0,09	0,02	0,02	0,04
(6) CDS	69,59	18,42						1,00	,140**	,129*	,293**
(7) SIZE (MIL $)	39300,94	51396,40							1,00	0,08	,520**
(8) LONG	82,14	55,21								1,00	0,13
(9) R&D (MIL $)	2340,81	2569,07									1,00

**. Correlation is significant at 0,01 (2-tails).

*. Correlation is significant at 0,05 (2-tails).

The further step of the analysis consisted of two regression functions (Table 4): the first model considers the impact of control variables on Carbon Disclosure Score, in the second model the cultural dimensions are inserted.

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Table 4: Regression results

Variable	Model 1	Model 2
Hofstede cultural dimensions		
Power Distance		-0,113
		(0,183)
Individualism		-0,16
		(0,154)
Uncertainty Avoidance		0,318*
		(0,161)
Masculinity		-0,01
		(0,110)
Long-term Orientation		-0,02
		(0,121)
Size	1,011E-10	6,727E-11
	(6,894E-11)	(7,072E-11)
Longevity	,043	0,056974708
	(0,40)	(0,042)
R&D	1,485E-09*	1,654E-09*
	(8,931E-10)	(8,927E-10)
Constant	60,168***	59,556***
	(4,090)	(22,301)
Observations	368	368
R-Squared	0,121	0,190
F-Statistics	4,202***	2,553**

Robust standard errors in brackets
***. Significant at 0,01 (2-tails); **. Significant at 0,05 (2-tails) *. Significant at 0,10 (2-tails).

Regression results of model 1 show that the level of R&D is the only variable significantly related to Carbon Performance Score. In model 2, where cultural measures are introduced, the significance of the analysis increases (R-square=0,190). It means that cultural dimensions exert an important effect on the level of environmental proactivity.

In particular, the level of Uncertainty Avoidance has a significant positive impact on Carbon performance Score, finding support for H3. Despite the sign among variables is consistent with the assumptions, hypotheses H1, H2, H4 cannot be confirmed, due the poor significance of the predictors. Long Term Orientation is rather negatively related to CDS, again H5 cannot be confirmed in cause of the poor significance.

4 DISCUSSION AND CONSLUSION
Nowadays, environmental problems are receiving more and more attention at firm level. The snvironmental proactivity is considered an important tool for gain a competitive advantage, helping to reduce costs or increase differentiation.

Both theorist and practitioners highlight that national culture is an important drivers toward this proactivity, as the set of values and beliefs could affect company's ethical – or more specific, environmental- choices and actions.

Starting from this consideration, the paper analyzed the effect of cultural dimension, using the framework provided by Hofstede (1980), on corporate environmental proactivity.

Despite the linkage among variables follow the developed hypothesis, just the H3 had found statistical support.

In particular, it is demonstrated that companies based in a country that have difficult to deals with the fact that future can never be known, try to control it by implementing a more effective environmental practices. People do not feel comfortable in ambiguous situation and try to create beliefs and institutions that try to avoid this uncertainly.

Therefore, the study presents some remarkable implication but also basic limitations.

From a theoretical point of view, it opens the mind to deep analyze the predicted relationship among variables, since different results are presented. From a managerial standpoint, the study of the cross-cultural differences could affect the effectiveness of environmental practices at both intra and inter organization levels.

The lack of environmental indicator to measure corporate environmental proactivity is the main limitation. The lack of synthetic measure of practivity can be the cause of different outcomes within these researches.

Moreover, some important point is still missing. Even if it is demonstrated that national culture exerts a particular role into shaping environmental engagement, studies on this topic only examines the sinlge effect of different cultural dimension on proactivity.

Different results could derive as there exists a combined effect of cultural variables to be explored in depth, that could represent a new and interesting research issue.

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STRATEGIC PARTNERSHIP BETWEEN PRIVATE ORGANIZATIONS AND UNIVERSITIES: THE SEARCH FOR REGIONAL DEVELOPMENT THROUGH SOLUTIONS FOR HOSPITAL MANAGEMENT

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ABSTRACT

The public power and the private enterprise, main agents of national economic and social development, when cooperating strategically, promote increased functional efficiency of their activities. In order to highlight the relevance of such partnership, this article aims to analyze the potential of actions jointly developed by private organizations and Brazilian universities. The research problem is lined in the field of health, which hosted actions developed between the Federal University of Rio Grande do Norte (UFRN) and the Hospital Maternity Guiomar Fernandes (HMGF), located in the city of Alexandria, in Rio Grande do Norte. The study emphasizes the shortcomings of this organization, the resolving power of the university in this scenario and performs the analysis of the effects of this cooperation. The methodology used in this research was the case study in HMGF. With emphasis on fundraising and improving the informational management system, funding sources for projects of restructuring and expansion of the hospital were sought, as well as initiatives for developing hospital management softwares for small and medium sized organizations. As a result, the articulation between the university and the hospital provided the elaboration of a project for software development and the production of a project for physical restructuring and technological investment, aiming to expand the supply and quality of the hospital's services. The implementation of information systems, associated with investments in hospital infrastructure, provide increased efficiency in public assistance to the population, bringing both local and regional benefits, besides providing the authorities with relevant data on the development of public policies.

Keywords: Fundraising, Hospital management, Information system, Strategic cooperation

1   INTRODUCTION

The accelerated development of information globalization imposes, the dawn of new and complex technologies, the different ways of seeing the business environment, the relentless pursuit by the competitiveness of market are all factors which fall into an important tool vividly in the current techno revolution: knowledge. In this way, the correct operation of knowledge brings with it the opportunity to incorporate important information to business decisions, allowing them the possibility of achieving greater and better results on the market. It is exactly within this context where the partnership between University and company is inserted. The University, generation and dissemination of knowledge, becomes a powerful ally and licensor of process necessary to reach this knowledge. Companies look at a media holding which does not have access, or don't know how to make use of decisive way. On the other hand, the University has the opportunity, as an institution of teaching, research and extension, it can be inserted into the socio-economic reality of the country, to the same extent that provides the students an early integration with the labour market, managing to form people engaged in the problems the country faces, and better prepare them for the timing of egress.

The problem of public health, while the industry filled with urgent needs and administrative mistakes, falls in search of evidence of the power of the Resolutive problems experienced by private companies operating in this sector. There is evidence that in addition to these, it is necessary to promote joint actions with the participation of health workers, the private sector and civil society.

The Ministry of health in Brazil was established with the law n° 1,920 (Brazil, 1953) and is the Executive Branch entity that has the responsibility to organize and draw up plans and public policies in search of promotion, prevention and health care of the citizens of the country. Despite the campaigns and projects developed by the Ministry and from existing improvements when carried out a comparison with data from previous years, the Brazilian public health still reveals troubling features, requiring immediate actions to change that reality.

In this context, the š of Health System (SUS) in Brazil is the universal service system, namely, aims to cater to all Brazilians, without any kind of distinction of resources among patients without cost to them, where they receive care can be equivalent to your needs. In practice, the conditions of the SUS are quite different: according to the website of the Ministry of health on the internet, the IDSUS (system performance index of health), created by the federal Government, points out that Brazil has IDSUS 2012 equivalent to 5.47– in an average from 0 to 10 – showing that much of the population lives in cities with lower indices of quality of services than the ideal.

It is based on the above so that the present article aims to analyze the potential of general actions developed by Brazilian universities and private organizations in seeking to promote alternative solution to the shortcomings highlighted today in the public health sector.

Based on these questions, the search issue revolves around the following question: how and to what extent the University is able to serve as a partner to assist in solving the problems of strategic and financial nature of a hospital of Rio Grande do Norte? To answer this question, it was for funding sources that can fit to the reality of the institution, serving as support for the achievement of projects that would ensure the immediate needs for this organ.

With increasing significance, the article is divided into chapters and sub-chapters that start with the introductory perspective, followed by theoretical tooling where are presented the themes of the third sector and fundraising for this. It is therefore pointed to the option search methodology, which highlights the ways in which the research was conducted. Soon after, the structuring of the remarks related to the case study-where are the search results, so that, subsequently to be presented the concluding remarks in conclusion, in addition to suggestions for further work. The job is terminated with the bibliographic reference used in the search.

2 THEORICAL REFERENCES

2.1 Fundraising in the third sector

For Olak and Nascimento (2009) the third sector is made up of private institutions with specific purposes of lead changes and whose patrimony is constituted, maintained and expanded from contributions, gifts and grants and that, in any way, it reverts to its members or maintainers.

The main causes of the growth of the third sector, second Olak et al. (2008, p. 32), are summarized as follows: "(a) crisis in the public sector and consequent reduction of resources allocated to social areas; (b) volunteer growth, driven by increased awareness of the people, media support and standardization of this service; (c) growth of urban and rural violence; (d) greater business involvement, trying to Captivate consumers with corporate citizenship policy".

According to Silva et al. (2011), philanthropy, which is at the origin of the third sector, is a very ancient phenomenon and is characterized as a continuing action to donate money or other goods in favor of the institutions or persons. This practice is generally adopted by wealthy individuals, known as philanthropists or philanthropic people.

In this sense the term third sector has been used as opposed to the concept of first and second sector and that basically the third sector is not part of the public sector and has no interest in profit (Niyama and Silva, 2008).

Seen it, Villas Bôas Neto et al. (2003) States that management in the third sector is something that differs from the management of other private companies, because "the management of the third sector, in spite of using traditional management tools, it does through adaptations that there are administrative groups on a daily basis and they begin to be treated in courses and materials for this area-specific management".

Inserted in this context, the fundraising activity won, in recent years, great importance and came to be seen as an action that should be undertaken with increased dose of professionalism, given their significance for the survival of the institutions, since they may not be expecting that only the Government provide the necessary resources so that they can keep, or be at the mercy of donations, what forces and seek other sources investors, making the fundraising activity more efficient and dynamic.

The charities, non-governmental and non-profit organization has for many times their goals are not achieved due to problems faced in fundraising, which precludes the development of projects (Sartori et al., 2003). In this way, the success in fundraising depends on the relationship that is established with the donors, who are persons or institutions which usually

share the mission, values and objectives of the Organization (Szazi, 2005; Pereira, 2006; Tachizawa, 2007).

The stiff competition for resources available, the need to measure and assess the performance of managers, internally as well as to determine the feasibility of projects, fundraising, all these factors compel organizations to improve and innovate ways to capture (Adulis, 2001, 2002a, 2002b). According to Falconer (1999) and Tachizawa (2007), the main sources of financial resources are the cooperative agencies, foreign institutions, the sale of products/services, government bodies, companies, foundations and individual donors.

It is essential that the funded projects add value to the Organization, helping to build its history and contributing to the creation of organizational skills that help in getting new features (Cruz, 2012). Develop fundraising strategies facilitates the adaptation of organizations to changes and requirements of funding sources, to ensure the sustainability of their goals and initiatives. With the expansion and diversification of sources of funding, organizations reduce the vulnerability and subordination typical of when it depends on very few sources of funds (Valarelli, 1999).

3 METHODOLOGY

For the completion of the current work, the methodological option chosen was the case study of the exploratory and descriptive type based on reality and on the characteristics of the object of study.

As research, research the case study can be essentially exploratory, being used as a basis for obtaining preliminary information about the object of interest. May also be analytical, where one seeks to discuss the object under study, build or develop a new theory in order to confront her with something that already exists. To be essentially descriptive, aims to describe some of the case study. An exploratory character work is viable as a pilot study of a large-scale research. The descriptive study when it is necessary for the preparation of an intervention. For Goode and Hatt (Lazzarini, 1995), the technique is "one way to organize the data in terms of a given unit chosen". Yin (2005) States that the case study is an empirical research, a method that covers everything - planning, data collection and technical analysis of the same. Yet about the theme, Yin (2001) States that the case study is a scientific research that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly defined; facing a situation technically only in that there are more variables of interest than data points and, as a result, is based on multiple sources of evidence (...) and benefits from the prior development of theoretical propositions to drive the collection of data analysis.

Accordingly, this study deals with the elaboration of financing plans for obtaining financial resources for a nonprofit organization, deployed from the analysis of their reality.

To this end, the fieldwork lasted from March 2012 to December 2012, during which time he explored the characteristics of Maternity Hospital Guiomar Fernandes (HMGF) from the point of view of knowledge gained at the Academy, general purpose of an extension project approved by the *Universidade Federal do Rio Grande do Norte*. The research had the same coordination of research project, a Professor of industrial engineering at the University.

Thus, in a first step the objective the bibliographical research with regard to funding sources available to establish what and with what focus these could be employed for the purposes necessary for the institution, as well as allow its authors Foundation enough to direct them in the implementation of the current work. Then worked with authors that deal with specific themes, in conjunction with the consultations the scientific articles and research databases, portal of periodic.

Capes. in a later step, aimed at the diagnosis of the situation of the HGMF regarding financial funding to the everyday reality of the hospital, as well as its physical structure, professional framework, shortcomings and needs. For this purpose, were made trips to the city where the institution to achieve a participant observation. As the central data collection techniques utilized to documentary research in financial reports prepared in the file, as well as access to documents on the legal status of the hospital, statistics on the number of calls made, medical equipment; and meetings with the directors, managers and other employees of the hospital.

In a third step, the data coming from the previous step were analyzed in qualitative way, in search of interpretation of these for the moment of the proposition of financing plans. From there he left to develop fundraising projects that meet the interests of the Organization, preparing and submitting three project financing as financing institutions concerned model.

4 CASE STUDY

4.1 History and description of the main initiatives

The Maternity Hospital Guiomar Fernandes (HMGF) is a health establishment of charitable purposes, with certificate of Social assistance Beneficent Entity (CEBAS), founded in May 1, 1956, initially to meet the demand of population of Alexandria, city of Rio Grande do Norte, today with 14 thousand inhabitants. Featured in founded as maternity hospital, HMGF today offers a range of services that the ranks as general hospital.

In the last ten years the hospital developed quickly, passing through a reform of the physical structure and deployment of new equipment and services, funded by the Ministry of health, through the project ReforSUS, which provided duplication of its installed capacity. Developing administratively and technically, with bigger and better resolving power, plus a considerable improvement of the quality of care. Currently, its area of influence is distributed in the municipalities of the 6th Regional health of Rio Grande do Norte, Northeastern semi-arid region, comprising 36 municipalities and some other of the 2nd Regional Health/RN, covering an area with a population of more than 400,000 people, as well as neighboring municipalities in Paraíba, all serviced exclusively through SUS.

Offers services identified by three fundamental classes: outpatient clinic (related to clinical consultations), clinical and surgical inpatient (referring to the patient's hosting), as well as diagnostic support through Imaging tests and laboratories. Outpatient services offered are divided into the following categories: medical clinic, gynecologic, orthopedic, obstetric, angiologic, Pediatrics, cardiology, Gastroenterology, ophthalmology; In addition, speech therapy and physical therapy services.

Among the surgical services are offered: General Surgery, vascular, ophthalmic, orthopedic, obstetric, gynecologic, otorhinolaryngologic dermatological and. There are also image diagnosis support via ultrasound, endoscopy and radiology, electrocardiography, as well as clinical analysis laboratory services and microbiology, still with the inpatient services, urgent

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and emergency. Also in the field of diagnostic electrocardiography, support that integrates the cardiac telemedicine service, in which the exam is done at the health facility and is analyzed and the report issued by a professional in another location, this made possible thanks to the transmission of information across the World Wide Web, which provides flexibility to the institution in the diagnosis of their patients since there is no medical need to be physically present for review of that examination.

There is also the Hospital epidemiology Service (IF) that brings together all the information of the hospital health and compulsory notification services, as well as the national network of Integral attention to health of a worker who is a network of Sentinel "medical services and ambulatory of medium and high complexity responsible for diagnosing the accidents and work-related diseases and by registering them in the information system of reportable diseases (SINAN-NET)" (Ministry of Health, 2009).

The HMGF offers a Material and sterilization (CME) that employs advanced technology to monitor the results achieved through modern validation evidence, besides industrial laundry, electric generator, and waste management program in the Health Service-PGRSS.

Are eighty-seven (87) professionals involved in the dynamic daily, of which twenty (20) are doctors, thirty (30) nursing professionals, ten (10) technical areas of support professionals and twenty-seven (27) General Service staff.

The wealth of the hospital is composed of assets acquired through purchase or donation. Currently has an installed capacity of fifty (50) beds in the national register of Health Establishments (CNES); Surgical Center with three (03) operating rooms, as well as structure and equipment for physical therapy services, speech therapy and occupational therapy.

The maintenance of this structure has a high cost, which is aggravated by the meager income of the hospital. By attending exclusively via SUS, regular income is restricted to the payment of the procedures performed, which is a fixed amount, established by the MS and applied to all health units.

Other features are the parliamentary amendments, approved resources in the annual budget of the Union, or of the State. These revenues, in turn, are for specific purposes, such as purchase of equipment, medicines and equipment, making it possible to target them to payments of fixed costs, such as salaries and maintenance. Another feature of this type of resource is the fickleness, not possible to stipulate certain deadlines for their receipt.

The low volume of resources makes investments in various areas, especially in those that demand the most expressive values. An example of this is the creation of a diagnostic imaging Center, which would correspond to the region of the high West Brazil today without a structure, requiring often going to the capital to carry out examinations. In addition, a technical limit to the expansion of cardiac telemedicine service is the poor quality of internet service in the city, restricting the capacity and range of exams that could benefit.

Another challenge faced by HMGF, and that is also true in other institutions of similar profile is low managerial and operational efficiency, sometimes explained by low supply of instruments that aim to meet the demands of a health unit for small and medium businesses,

being almost non-existent software accessible for this slice of the market. The development of software of this kind demand high investments and time to maturity and implementation.

4.2   Partner HMGF/UFRN

Acting together at the Federal University of Rio Grande do Norte with HMGF was one of the actions planned for the development of strategies on fundraising for the hospital. Through the technical expertise provided by UFRN, extension actions were developed aiming at the improvement of the health unit. The partnership provided to both development, since when approaching a social institution the University gives to its members better reading of the external reality, seeking applications of his theories and improving its techniques, establishing a link between students and the society that allows them greater understanding of what is learned in the Academy. While the hospital receives the contribution of students, teachers and technicians, often in contact with innovative solutions and channelized for various surveys. There is a deficiency in the institutions in General, especially in smaller, pros to develop projects aiming to plead financial entities with the resources or even companies. This grace period deepened when we leave public sector organizations or non-profit. Thus the partnership HMGF/UFRN was established in order to build projects to enable the hospital to request funding, sponsorships and donations to carry out its goals. In addition to projects of this nature, were also developed other seeking to improve the quality of information, developing ongoing evaluation mechanisms, both as an information management system.

4.3   Results

Accurate analysis of existing demands in the hospital revealed structural, managerial problems and staff. From these projects were elaborated demands aimed at raising funds for investment in strategic areas.

A situation observed in HMGF was the absence of an integrated system of hospital management, which would give employees greater accuracy on the information, providing increased operational efficiency, both for greater agility and the ability to better control, reducing waste and freeing up resources. In order to meet this need, devised a system of information technology applied to the management of hospital institutions, small and medium-sized businesses. Through a business plan encompassing market and competitiveness analysis, analysis of the internal environment, product plan, marketing plan and financial plan has structured a product robust and commercially viable for hospitals of this size, since there is a lack of information systems geared to this audience.

This system would consist of ten integrated modules with one another, which would provide information to employees including via remote connection via web platform. The modules would be the following: hospital management, hospital support, hospital billing, particularly Comptroller and covenants, billing the unified health system (SUS), clinical administrative management, clinical management, diagnostic and therapeutic service, supplies, technological support systems.

Fully deploy this system brings, including benefits to public management, as it allows the crossing of various natures information coming from different locations, producing valuable information such as epidemiological distribution, occupancy rate of beds and medical area professionals distribution which allows public health managers more accurate analyses and the development of more efficient strategies.

The concentration of health units able to care of medium and high complexity in the two largest cities in the State of Rio Grande do Norte, Natal and Mossoró, causes a swelling in the hospitals of these cities, being one of the reasons a lot of patients coming from other cities. Within this context the HMGF provides service to a region with a population of more than 400,000 people, since apart from the municipalities of its regional health, people coming from other areas, including the State of Paraiba, seek the HMGF for consultations, surgery and hospitalization. Given this problematic and aimed at the expansion and improvement of these services were prepared two projects in different lines, but equally important in the population. The first was creating a diagnostic sector and orthopedic care of medium complexity, which involves the restructuring and expansion of current facilities and hiring of specialized professionals. This project was developed with the idea of offering the most complete service area population, decreasing the need for these to go along long distances in search of care. This directly impacts on the effectiveness of patient care and public health system efficiency, since from a balanced distribution of the demands there will be reduction of quotas in the major cities, from the queues of waiting for consultations and surgical procedures.

The realization of this project had the following objectives: prevention and treatment of diseases of the brain and cervical order, analyze rich of fractures related to bone changes, perform Cardiology accompaniments, develop gastrointestinal analyses, perform mammography examinations for prevention and treatment, blood analysis, perform diagnostic imaging, surgical interventions and evaluation of Cardiology after-treatment. For both, were provided for a series of civil works and procurement of miscellaneous equipment, as well as hiring and training of professionals to work in the area.

Another project developed seeking the extension of the range of services was the deployment of a wing of the maternal and child health care capable of giving to the population of the region medical services such as examinations, surgeries and treatments geared to the mother and the child. Attention to this area has a high relevance for the region, as the maternal and child health indicators such as infant mortality rate, neonatal mortality, perinatal mortality, maternal mortality rates are among the highest of the Brazilian States influencing directly on regional development.

From the perspective of fundraising, the fruits of the partnership are based detrês HMGF/UFRN projects-being a product development and expansion and restructuring two-hospital managers have greater chance of success when pleading appeal to funding agencies, development banks and Government agencies. Bypassing the line of action of projects, can still be cited eight scientific articles presented in Congress and another six published in journals, as well as two monographs, all of these indicating the success of the partnership.

5 CONCLUSION

The improvement in the health of the Brazilian population did not follow the advancement of economic indexes of the nation in recent years. In a country with very high tax rates, which is invested in public health is not yet the required value, what is proved by those who need the services of Health š system (SUS). Designed to be a universal system and ensure quality care in health care to citizens who so request, the reality of the numbers of the SUS is completely different from objectified in your project. There are doctors, beds, basic physical structure, materials and necessary medical equipment to health problems of the population.

See this, the University-business partnership featured in this survey pointed to a change in the reality experienced by HMGF, reality this fairly close to that experienced by SUS because it is directly dependent on this, while it encourages those who are inside the University a broad vision of the current situation of the society in which they are inserted. While the University hospital Board delivery technical knowledge regarding management strategies, also cares about the other needs of the Organization, pointing out that the major difficulties faced by the hospital fall in the absence of sufficient financial resources to cover what it is necessary to raise the institution to a better level of service to their target population.

Equally difficult is the search for sources of funds - and the return of those who are willing to invest in this issue, which is worrisome given the relevance of the theme in the health problems experienced by society. Thus, in addition to the delivery of a different vision as regards the way in which sees the hospital day after day, the projects for financial - fundraising and other scientific papers are presented as results of the University-company partnership highlighted in the case of the search.

In this way, the partnership can prove HMGF/UFRN effectiveness of benefits of mutualism between the University and the company, to the extent that the initial goal of the extension project which led to the drafting of the article was reached when the students were able to apply the knowledge acquired in the classroom within the perspective of the problems faced by the hospital, while the hospital has benefited from that knowledge to apply to methods, human resource processes and available for carrying out the procedures of daily life at the hospital.

Similarly, the overall objective of the article was fulfilled and his search was problematic, since it is presented as the University-business partnership is important in the search for effectively promoting solutions to today's shortages experienced by the public health sector, and even what stage the Resolutive power of this strategic partnership is able to bring clear benefits to both institutions.

The search does not allow methodological option by itself that the peculiarities provided in case the job object can be extended to other Brazilian States. We then the questioning about the possibility that extension of reality presented to other localities of Brazil, thus encouraging other researchers to further develop this theme, in seeking to promote new solutions - either in University-business partnership, or by other methods - for problems faced by hospitals, with a view on the current situation of significant improvement of public health in Brazil.

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Enterprise in Turbulent Environment

AUTOCATALYTIC PROCESSES OF ORGANIZATON TO SURVIVE IN CONTEMPORARY SOCIETY

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ABSTRACT

A few decades ago scientist have already put the finger on a problem that organizations will face with extreme changeable and unpredictable business environment. One of the problem which are contemporary organizations have met is how they anticipate future need of society. They plan their action and organize processes according to this facts. Theories which were applied in management no longer works, they do not completly sustain organization contiunity. Our basic assumption about birth, evolution, survival and function of organization and society has been challenged. According to above mentioned, this paper identifies two problems. First of all organization based their strategic processes on knowledge which is created upon past information and knowledge. They only focus on the need of society neglecting the real problem behind it. On the other hand these anticipations are based on trends, which are not valid in turbulance change. Therefore, these quantum leapes of changes are forcing to apply knowledge from science such as systems theory, chaos theory, quantum physics and some knowledge of genetic engineering. In particularly this paper observes and represents the processes of organization as autocatalytic processes.

Keywords: Autocatalytic processes, Chaos theory, Complex dynamic systems

1   INTRODUCTION

Processes of globalization and new information technologies have changed the world as we knew. Everything is changing: our life, businesses, economy, we are flooded with information, there is a world with no clear borders etc. In short, society has changed and created an unpredictable, uncertain world. These changes of society made impact on today's organizations. Scientists warn of these problems over the past few decades.

In today's increasingly competitive, unpredictable and turbulent business environment organizations can no longer successfully apply theories of management which were effective and efficient before. The contemporary businesses require new approaches in the process of creating their business strategy, which could ensure the survival of the organizations.

So, this paper identifies two problems:
1. The first problem is that organization based their strategic processes on knowledge which is created upon past information and knowledge. They try to anticipate the future need upon past information.
2. On the other hand, they only focus on the need of society. They do not try to discover the real problem behind this need. Besides, the anticipation are based on trends using technical analisys. They worked very well before, but not in business environment with turbulance change. And this is the second problem.

The main charateristic of changes in today's business environment is that they occur in quantum leapes. So existing scientific management approaches and practices are not good enouhg. The impact of these changes requires new approaches in organizations function. They

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are forcing to apply knowledge from science such as systems theory, chaos theory, quantum physics and some knowledge of genetic engineering.

This paper applies this different knowledge, and observes and represents the processes of organization as autocatalytic processes. It represernt an approach to discovery autocathalitic processes in organization.

2 APPROACH TO DISCOVERY AUTOCATHALITIC PROCESSES IN ORGANIZATION

More than half of century ago Kenneth Boulding invented a scale for systems classification on complexity and behavior. The scale of this classification ranges from 1 to 9. On this scale organizations and human society are at the 8 (eight) level. Systems at this level are able of self-regulations, self-organizations and self-governances. By research of these complex behaviors we can identify number of processes with autocatalytic properties.

Investigating population of organization we identified autocatalytic processes by which evolution of genes, memes and mones are achieved. So at the present level of development of science we can state, that organizations are outcome of co-evolutions of genes, memes and mones.

Organizations are living organisms in which human being is an essential constituent. Human being is a result of **genetic evolution**. One of the vital precondition for functioning an organization is communication between human beings which is necessary to convey ideas and thoughts between them. Communication between human beings is an outcome of **memetic evolution**.

Organizations could survive and develop if they create value for their environment. Value creating is also related to one evolution, and this is the **monetic evolution**.

All these evolutions emerge in every organism and every evolution is an environment to the others. This way they are in an interactive relation, creating a whole entity, an entity which is outcome of co-evolution. So every organization can be considered as a result of genetic, memetic and monetic co-evolution.

Figure 1 illustrates the essence of co-evolution:
- Genes regulate self-reproduction of biological being and biological life using the laws of physics, chemistry and specific principle of biochemical mechanisms.
- Memes regulate self-reproduction of cognitive schemas through mechanisms of thoughts. In other words they regulate cognitive mechanisms of human being.
- Mones regulate self-reproduction of organizations using psychological motivation mechanisms of human being.

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genes regulate
self reproduction
of living organism using
biochemical processes

memes regulate
self reproduction
of cognitive images (shemas)
using cognitive mechanisams /
mechanisam of thinking processes

organization-coevolution

evolution of
genes

genetics

memetics

evolution of
memes

generate
ideas/
thoughts

generate
biological
orginism

monetics

evolution of
mones

generate
products/
services

mones regulate
self reproduction
of organism through
psychologic motivation
mehanisams

Figure 1: Illustration of the essence of co-evolution

This knowledge, which was completely formed in the 21ˢᵗ century, has been the result of the development of science in the last two centuries. There are many scientists who have contributed to this knowledge, but only a few of them have special merits in this matter like Charles Darwin (discovering the basic principles of evolution -diversity, natural selection, inheritance), Richard Dawkins (establishing the selfish gene theory and introducing the term meme) and Douglas Hofstadter, Mérő László, etc. (discovering the mechanisms of natural law of self reproduction and proving with scientific precision the phenomena of mone as replicator).

First of all, it is necessary to explain what kind of roles genes, memes and mones have.
- Gene is basically very simple information. It is a sequence of four types of nucleotide of DNA. It is a peace of information that encodes one feature of an organism. So one biological being is determined by all of its genes.
- Meme is also information which encodes one feature of cognitive schema. Group of memes determines a cognitive schema of the entire organism.
- Mone is also information. But in contrast to gene and meme, it describes one characteristic of organization (enterprise) which is capable to draw investments and in association with other mones it is capable to generate an economic being – an enterprise.

It could be concluded that the essence of all replicators is information and the form of appeearence is just a technical issue.

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Organizations, as any organism, in the struggle to survive use replicators. And they use only those autocatalytic processes which they need for their survival. Figure 2 presents the structure of process for survival with all of the factors needed for its performance.

The first part of this process is something which occurs in any organisms: when organisms function they consume resources and in certain time a shortage of these resources emerge. This shortage is a problem to organism, so sensors immediately signal this problem. In respond to this sensory, organism selects processes which are needed for its survival and which are performed only after selection. And at the end, the problem is solved. In the case that these processes are failed organism's existence is in jeopardy.

But in some case organism could not solve its problems only with inner proccesses, that are described so far. It needs help and sevices from the outside world. And these outer procceses are the second part of procces neccesary to survive. It is equally important, so it will be described.

When organism applies existential procceses to resolve its problem a key question arises: who performs these processes? In some cases the indidual can perfom it by itself, but sometimes it needs help from other individuals. And that help can be accomplished in several ways. One possiblity is when several individuals help to solve the emerged problem uniting their knowledge and forces. Naturally, this allience of indivudal depend on the nature of the problem. The other possibilty is decomposition of the process needed for problem solution into several components and allocate them among the individuals who perform the activities.
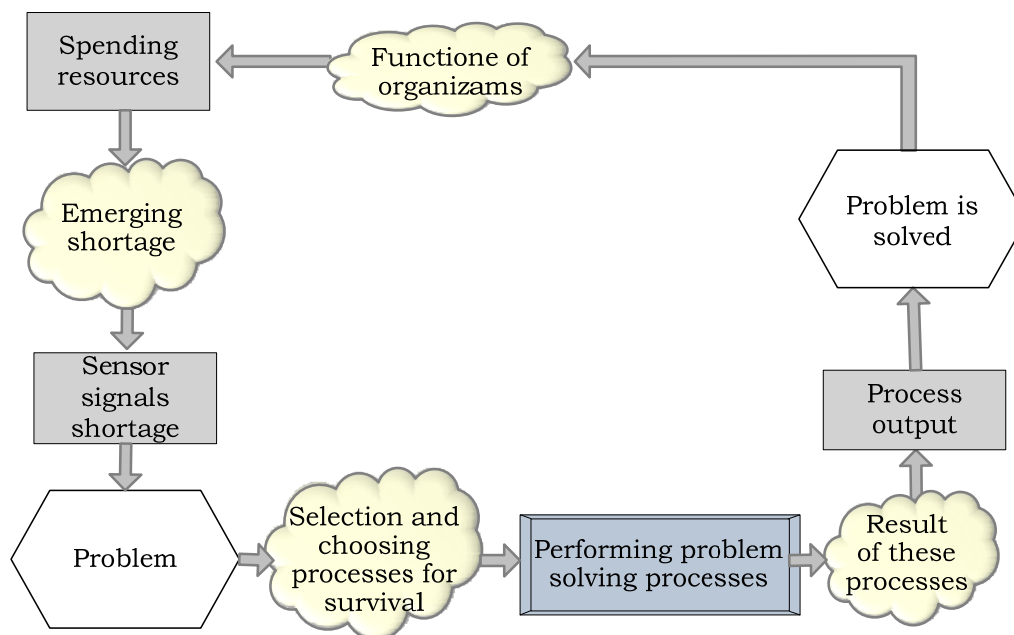
Figure 2: Cycle of survival through the factors needed for its performance

But there could be a situation when complex approach is needed. In this case some parts of performed procces could be based on the unity of knowledge and force and some parts could be allocated among the perfomer of the activities (Figure 3).

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What ever way is chosen for problem solution, it is neccessary to be effective and efficient. Hence, all this leads to the need of forming an organization. From this stems that the **basic function of any organization is problems solution**.
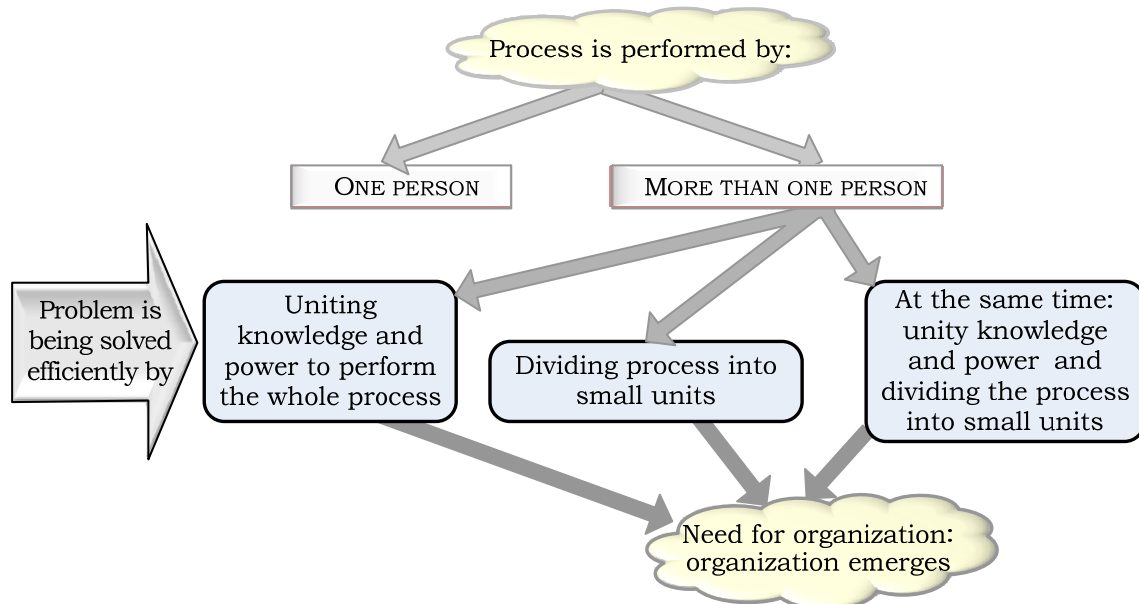
Figure 3: Emerged needs for forming an organization

Organizations are like living beings. They solve problems and they need resources for their function. If there is a lack of recourses their existents are endangered. Figure 4 shows the autocatalytic process for survival of organizations.
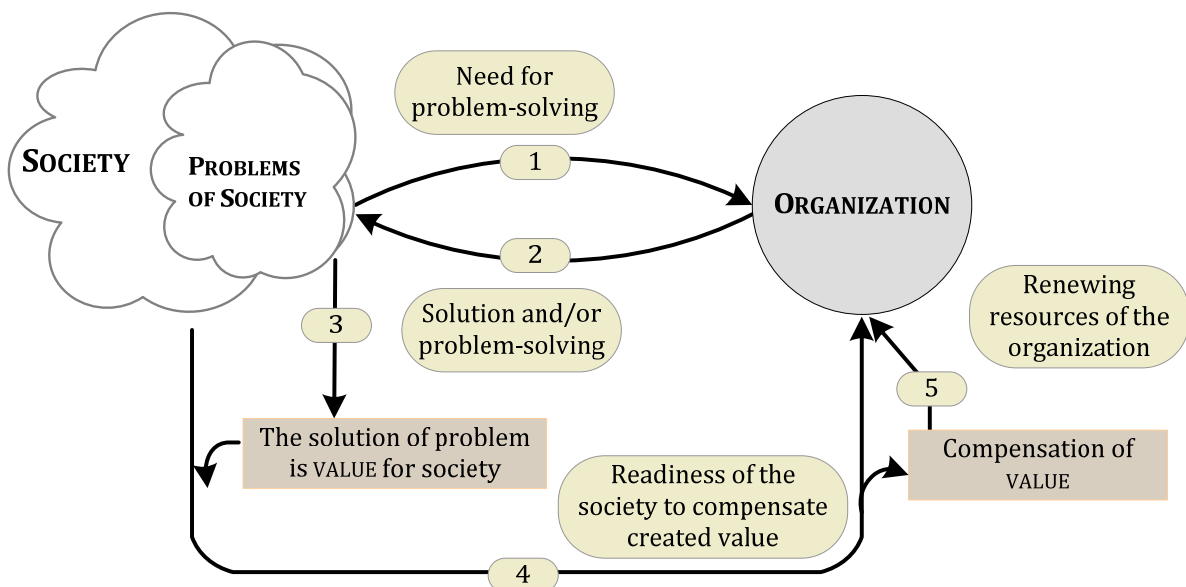
Figure 4: Autocatalytic process for survival of the organization

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After identifying the problems of society (1) arises a need to solve them. These problems are solved or are being solved by organization which is able to do it. When the problems are solved, the society is survived (2) and in that way value is created for society (3). If society reacts wisely and appropriately in long-term, it will be ready to compensate the created values with previously created ones (4). And that enables the organization to renews its consumed resources (5). When this described process is activated and maintained, an autocatalytic process of organization survival arises.

Autocatalytic processes are important in nature, because they are the foundation of life**. They keep organism alive without outside interference.**

As the society develops it becomes more and more complex and consequently its problems are less obvious. And only what are obvious are the "needs of society". Problems related to the needs of society in some cases could be recognized, however in most cases it is not known how these needs arise i.e. how a problem or problems should be solved with these needs.

Today organizations recognize the "needa of the society" instead they identify its problems. Relations of the organization and the society are transformed in the form presented in Figure 5. In the society beside the domain of "problem" there is another domain, which is "the needs of society". In most cases organizations are related to the needs of the society rather than to its problems, which means that relations: 1-2 and 2-1 dominats instead of 1 and 2.

Chances for survival and development of the society largely depend on how the company can detect and identify their needs and how can they formulate these needs. In the relations of society and organizations instead of VALUE, the IMPRESSIONS OF VALUE appears. In the center for future research arise uncertain relations: 1-1 mapping the problems into the needs of society, 2-2 how the fulfillments of the needs contribute to problem-solution and 3-01 how the value coresponds to the impression of value. Beside these relations the main question is what should be applied to discover and identify the real problems of the society.

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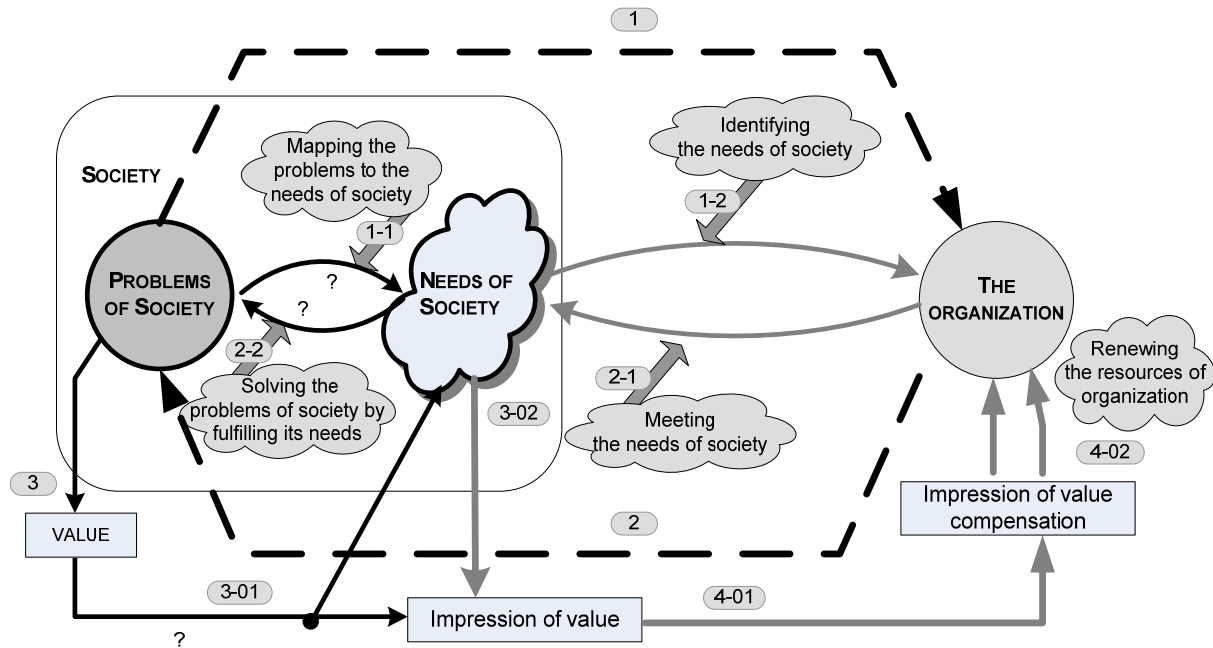
Figure 5: Transformation of autocatalytic process for the survival of organization

The methods and tools applied so far in identifying the needs of society are not appropriate to detec and identify problems of society. Identification of problems means discovering the right diagnosis. And as in medicine, in the pursuit of a diagnosis symptoms should be identified and recorded. But the question is how could the right diagnosis be discovered?

First of all it requires:
- certain knowledge,
- information about the phenomena and
- tools and methods for getting information.

But considering the human societies it requires integrated knowledge about them from every important aspects. To this comprehensive, relevant knowledge we can get through "*integrated systems models*". So, in the first place it is necessary to create "*Systems model of human society*" (SMS) and "*Systems model of concrete organization*" (SMCO). By linking these two models an "*Integrated system model of society and concrete organization*" (ISMSO) is created.

The creation process of system models of society and concrete organizations is carried out through several cycles:
- in the first cycle the **classification structure** is created,
- in the second cycle the **static structure** is identified,
- in the third cycle the **dynamic structure** is identified,
- after that follows the cycles in which the model of behavior of organization and society is created:
  - firstly, functions of survival, development and management are modeled,

o secondly, processes are modeled to the level of activity (here is especially important to discover numerous autocatalytic processes, because they are some of the vital condition for successful function of society and organization),

- after that dominant variables and parameters of structures, behaviors and management are identified,
- and when the modeling process is finished, a computer simulation is performed to test the model.

From the model is expected to reflect to substantial extent the behavior of society and organizations. The model (ISMSO) is a powerful instrument for decision makers in the organization. They can examine and explore the integral behavior of societies and organizations. Not only that the model (ISMSO) can reveal the present problems of the society, but also the problems in future and even well before they emerge. Figure 6 illustrates these system models - SMS, SMCO and ISMSO.
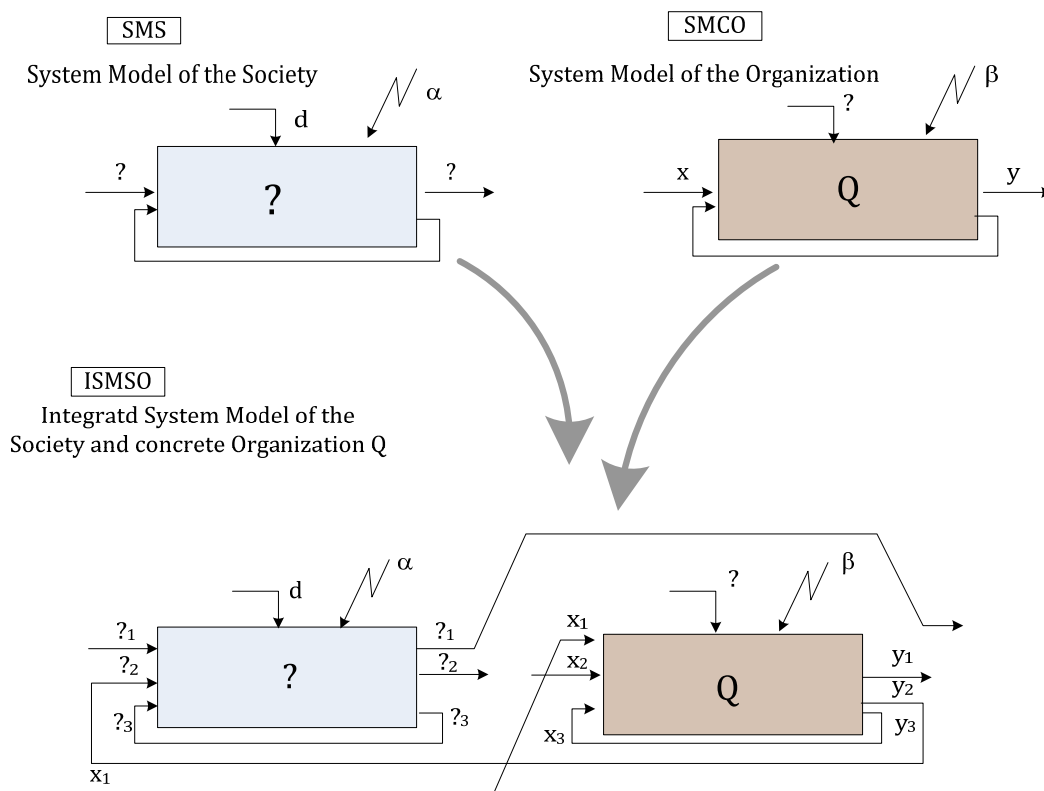
Figure 6: Creating Integrated system models of the society and an organization from the system model of the society and system model of the organization

3 CONSLUSION

The results of the presented approach in this paper is creation of an Integrated system models of the society and an organization.

When an organization is managed as whole organism, the (ISMSO) model is applied:
- in discovering problems of society,
- in discovering the profit potential, which can be achieved bay the solutions of discovered problems,

- in discovering those new functions, which are necessary to solve the identified problems,
- in the process of identifying the performer of function and
- in identifying new, essential competencies which are necessary in organization.

To achieve short-term advantages over the competition, it is enough to start from identifying problems of society and not from its needs. But, it is not enough if they want to compete for the future! Permanently discovering the future and taking advantege of it, is what future successful organization should do.

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FACTORS OF DESTINATION MANAGEMENT AND THEIR INFLUENCE ON THE BRAND OF KVARNER DESTINATION

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ABSTRACT
Destination, as a fundamental concept of tourism, is considered to be a product which is extremely difficult to manage, and market because it arises from a number of different products, and many activities of different organizational units and stakeholders that team up to deliver the final product, and create an area of intensive tourist gathering. Sustainable competitive advantage of modern destinations is primarily achieved through the distinctive destination brand. Tourism in Croatia is one of the most important industries with a long tradition and great development opportunities. Therefore, this study aims to test a conceptual model of tourism destination competitiveness, and also the hypothesis according to which which the implementation of destination management elements is a prerequisite for creating a recognizable destination brand of the Kvarner region as one of the most successful Croatian tourist regions.

Keywords: Branding, Destination management, Kvarner region, Tourism

1 INTRODUCTION

Although essential to the travel and tourism system, the destination is widely acknowledged to be one of the most difficult products to manage and market due to the numerous products, organisational parts and stakeholders that are combined to deliver the destination product (Fyall, Garrod and Tosun, 2006). Tourism is, as a very propulsive and dynamic process, associated with new categories and types of arrangements and arranging travel. However it should be adapted to the internal organization of business entities that are engaged in this activity. Specifically, the business entities need to innovate in the field of strategic management and adjust marketing mix according to the demand and desired brand positioning (Mrkaić, 2012). Contemporary destination management is faced with increasing competition and substitutability and branding provides a great tool for creating a sustainable competitive advantage. Kotler and Keller (2007) note that effective branding represents not only an advantage for the company but also for turists who can make easier perceptions about differences between destinations and thus decide on where to travel. Excellent service quality and acommodation are no longer distinctive advantages of a destination. Each destination offers numerous attractions and most countries claim unique culture and heritage. The question arises about the key difference between the two neighboring Adriatic islands or some Mediterranean destinations. Sun, sea and sand are rarely a unique and exclusive solution.

Tourism is one of the most important Croatian industries and Republic of Croatia, as one of the most important tourist destinations in the Mediterranean, has a long tourist tradition and great development opportunities. Kvarner is one of the most developed tourism regions of the country with 173 000 acommodation capacities, representing approximately 20% of total

tourism carrying capacity, and the region generates about one fifth of the total tourist traffic in Croatia. Precisely for this reason, the main goal of this study is to identify and define the factors that constitute a prerequisite for creating a recognizable destination brand in order to identify guidelines for effective destination management, timely recognition of strengths and minimization of weaknesses, so that one can adequately act in the direction of strengthening the brand of the Kvarner region and create sustainable competitive advantage for the region, as well as Croatian tourism in general.

2   LITERATURE REVIEW

Although the roots of branding date back to the late 19th century with the development of branded consumer goods, the concept of branding has only recently become a prominent subject in the scientific and professional marketing literature (Aaker and Joachimsthaler, 2000; Fenichell, 2002). Within the context of tourism destinations, branding started to gain visibility with destination branding as a central topic at Travel and Tourism Research Association's Annual Conference in 1998. Since then, the concept becomes an even more significant subject in the papers of leading authors in the field. If we take into account the fact that the modern consumer is well informed, and that he requires increasing value of paid products and/or services because the consumption of the product not only meets his specifics need, but also communicates his lifestyle, attitudes and needs and associates him with his own kind, it can be concluded that the key competitive advantage of a destination is achieved through the emotion of the client, or tourist.

The answer to the question of how to develop a connection between a specific destination and tourists lies in branding. Namely, a brand differentiates products and represents a promise of value, arouses emotions, forms beliefs, and calls consumer to action, i.e. buying the product (Macrae, Parkinson and Sheerman, 1995; Schiffman and Kanuk, 2000). Choice of holiday destination is thus a significant lifestyle indicator for today's aspirational consumer, so the places where he spends the hard-earned income and limited vacation time have to be emotionally appealing with high value for his peers and observers. The World Tourism Organisation (WTO) talks about this in terms of seeing destinations as tomorrow's fashion items, suggesting that the next century will mark the emergence of tourism destinations as a fashion accessory. The choice of holiday destination will help determine the identity of the traveller and, in an increasingly homogeneous world, set him apart from hordes of other tourists (Lurham, 1998; Morgan, Pritchard and Piggott, 2003). Countries, of course, represent much more than mere fashion accessories. They are often (but not always) sovereign states, they are territories governed by competing interests and political agendas and their marketing has to be viewed in a context of a wider global socio-political system. For these reasons, destination branding is a highly complex and politicised activity and thus, despite its historical pedigree, the notion of branding a country is often greeted by scepticism and occasionally by outright hostility of the destination management organizations (DMO), which should reconcile the interests of private business, as well as strategic, long-term development interests of the public sector, thus ensuring the future of tourism.

According to Morrison and Anderson (http://www.macvb.org/intranet/presentation/DestinationBrandingLOzarks6-10-02.ppt) destination branding is defined as a way of communicating a unique identity through differentiating a destination from its competitors. Moreover, according to Gnoth (2002) branding can lead to the creation of a positive relationship between local resources and products through export of typical products and sharing of cognitive and emotional connections that can increase the

attractiveness for tourists and buyers. There are several important issues related to the problem of destination branding. Ooi (2004) states that destination branding is observed mostly from the perspective of tourists, while little attention has been paid to the study of the concept from the destination managers' point of view. When considering the role of different stakeholders, Marzano and Scott (2009) state that destination branding process depends on a wide range of stakeholders who want their opinion to be implemented into the concept. Although the compliance between stakeholders and brand strategies is a necessary prerequisite to success, coherence of interests between stakeholders does not have to exist. Therefore, the mobilization of stakeholder interests is an important issue when supporting the brand (Hankinson, 2004).

The literature review shows that most of the studies in the field of destination management were focused on destination stakeholders, whereas the main research areas are destination image management (Blain, Levy and Ritchie, 2005; Wang, 2008; D'Angella and Go, 2009), destination branding and the role of stakeholders in destination management (Donnelly and Vaske, 1997; Augustyn and Knowles, 2000). Furthermore, methods and techniques of destination management (Faulkner, 1997; Lenhart, 1998), destination competitiveness (Ritchie and Ritchie, 2002; Gomezelja and Mihalic, 2008), and funding of destination management organizations have also been subjects of research (Masberg, 1999).

In summary, it can be concluded that stakeholders who participate in creating the destination's tourism product were analysed the most. It is interesting to note that tourists visiting the destination were excluded from the survey, leaving space for further research.

3 DESTINATION BRANDING AND CHALLENGES OF DESTINATION MANAGEMENT

Destination branding can be defined as a way to communicate a destination's unique identity by differentiating a destination from its competitors. Similar to the general knowledge and marketing theory on brands, destination brands indicate two important functions: identification and differentiation. In the marketing literature the meaning of identification entails the explanation of the source of the product to consumer. While a product in general terms represents a physical offering that can be easily modified, destination as a product is a large entity that contains a number of tangible and intangible elements. For example, a place includes tangible attributes such as historical sites and beaches, but also the intangible features such as culture, customs and history. Due to the complex nature of the destination to be a brand, the generalization of identity is inevitable. Brand identity is crucial for generalization of desirable characteristics projected by suppliers' point of view, and it explains the expectations of a supplier about how a brand should be perceived on the target markets.

Defining a target market is essential due to the fact that some characteristics of a destination may seem positive to one segment while negative to another (Fan, 2006). Based on the projected identity consumers should develop a relationship with a particular brand through generating value, or favouring and giving credibility to the chosen brand (Aaker, 1996). In general, tourism destinations emphasize points of parity between destinations such as quality accommodation, fine restaurants and well-designed public spaces (Sartori, Mottironi and Corigliano, 2012). When evaluating the brand it is crucial to understand what elements of the brand are superior to those of competitors. In fact, the key to branding is that consumers perceive the difference among brands in the product category because the brand, which is

seen as a distinctive and unique, is hard to be replaced by other brands. Many studies confirm that brand identity and brand image is a crucial ingredient for successful destination branding (Qu, Kim and Hyunjung, 2011; Cai, Feng and Breiter, 2004). Nevertheless, there are concerns about the meaning of these two concepts. One of the key points of differentiation is that the concepts are based on two aspects: the recipient's and the sender's (Florek, Insch and Gnoth, 2006). In short, identity is created by the tourist destinations-the sender, while the image is created through the perception of the recipient, or the potential tourist (Kapferer, 1997). Brand identity reflects the contribution of all brand elements to awareness and image. In order to brand a destination, the destination marketers project a destination brand identity through all the features and activities that differentiate a destination from its competitors. At the same time, the recipient (consumer - tourist) perceives the image of a destination, which is formed and stored in his mind. It is important to note the reciprocal relationship between brand image and identity of the destination. Brand image plays an important role in building brand identity, and at the same time is a reflection of it (Qu, Kim and Hyunjung, 2011). In other words, consumers build a destination image in their minds based on the brand identity projected by the destination marketers who form the destination offerings. Then, destination marketers and marketing experts enhance the brand identity in accordance with the consumers' perception. Therefore, it is clear that the destination image is crucial for creating a positive and recognizable brand identity.

When talking about the challenges of destination branding, Morgan and Pritchard note that the challenges are mostly related to financial problems, political matters and environmental issues. The first challenge facing destinations and their managers is the limited budget, especially when considered in relation to some of the world's producers of consumer goods. For example, a global giant like Apple may spend as much money as the combined total of most of the world's national destination organizations on its annual global advertising budget. Mentioned fact indicates the need for innovative marketing communications that will outsmart the competition rather than outspending it. This is often difficult to achieve, especially taking into account that there is a positive correlation between the promotional budget of the destination and tourist expenditures (Baker and Cameron, 2008). Destination policies and laws, which deal with the complexity of the tourism product, the number of stakeholders and the complexity of their relationships also, represent an obstacle to effective destination branding. The fact that the destination is an amalgam of products, services and experiences that are outside the scope of control of any one organization, and also due to the differing interests of stakeholders which can evoke conflicts, can also disrupt the branding. For example, the question on whether a tourist's opinion of destination image is based on functional values, social values, suitability for all ages or the possibility of experiencing a new culture, arises. In addition, destination managers also have to consider the heterogeneity of travel motives of different target groups, which represents a challenge to find common ground on which the brand image and the destination brand can be built. As a result of an unsuccessful response to the environmental challenges, the image the consumer has of a destination brand can be quite different to the self-image intended in the brand identity (Pike, 2004).

From the foregoing it can be concluded that the new trends impose a shift from the classical concept of destination in terms of its content and capacities towards the concept of a destination as an integral identity and range of experience. Destinations are undergoing a transition (Jurin, 2008):
   1.   from the destination product towards the concept of destination experience, and

2. from destination marketing towards destination management.

Tourists are no longer passive observers of destination events; they expect a myriad of activities, events and a wealthy experience. Experience or adventures are new destination offerings; they represent the destination marketers' reply to the demands of modern tourists, who want to be treated in a distinctive and memorable way. Complexity of the political, economic, social and cultural conditions at the national, regional and local level requires a more precise identification of conditions, resources and organizational structures as well as solutions to fulfil the potential of destination, in order to meet the "on demand" principle of the tourist. Management of tourist destinations is facing a challenge of optimizing the impact of tourism and achieving strategic goals. The task is even more difficult due to the fact that the various destination stakeholders (visitors, local residents, public sector, hospitality companies and others) involved in the development and production of tourism products often, as already noted, have different and even and conflicting interests. In the constellation of such relationships, tourism organizations not only have the task of coordinating the marketers and suppliers destination and encouraging destinations' promotional activities, but they are transformed into destination management organizations with the main purpose of managing the destination. To manage a tourist destination means creating innovative destination management as an identifiable, qualitative development-oriented leadership, which is characterized by the knowledge, clear vision and authority, supported by local governmental authorities, tourism experts and destination marketers, along with the respect of the local population, so that it can, according to the principles of integrity, become a cohesive force for all relevant interests (Laws, 1995). Quality destination management is becoming increasingly important in the global tourism market, as well as in Croatia, where this issue has only recently, despite its importance, received increased interest.

In conclusion, it can be said that the basic element for the success of tourist destinations is the ability to recognize and adapt to change through a range of key factors that interact together. Therefore, this paper presents the concept and the results of an empirical research aimed to define and explore the factors that, in the destination management, create the foundation for recognizable branding and which influence the creation of destination image.

4 METHODOLOGY OF THE EMPIRICAL RESEARCH ABOUT THE IMPACT OF THE DESTINATION MANAGEMENT FACTORS ON THE BRANDING PROCESS OF KVARNER REGION

Empirical research examines which factors within the process of destination management create a recognizable brand of the Kvarner tourist destination, as one of the most prolific and most promising Croatian tourist regions.

The research was conducted using a questionnaire, through dissemination of e-mails and personal interviews with tourist officials and people involved in the development of tourism in the Kvarner area (local and regional governments, tourism organizations, development agencies). Research was conducte in period from February to September 2010. Out of 380 questionnaires sent, 107 were obtained back, and 104 of those were completed and usable for further analysis. The response rate was 27%, and the sample was considered relevant. Questionnaires were mostly returned via e-mail, and a smaller part was personally submitted. Most of the participants were under the age of 40 (70.2%), and the average age of respondents was 38.7 years. The questionnaire was mostly answered by women (68.3%). Most

respondents had a university degree (58%), 23% had high school education, and 19% had a master's degree or a Ph.D.

The sample included 27.9% of managers in tourism associations, 23.1% of the participants were hotel managers, 18.3% were employed in travel agencies, 10.6% of respondents belonged to the local governments, 7.7% of them attended postgraduate studies in the field of tourism, 4.8% of the participants were employees of educational institutions in the field of tourism, 4.8% were civil servants, and there were 2.8% of other respondnts.

The research was conducted through an integrated model of destination competitiveness - commonly used Conceptual Model of Destination Competitiveness, which is a combination of the basic Crouch-Ritchie model from 1999 and the Kim Dwyer model from 2003. The model was taken from the research on destination competitiveness in Slovenia, conducted by Gomezelj and Mihalic in 2008.

The study entailed the assessment of 85 indicators evaluated on the Likert scale of 1 to 5, and the indicators included various segments of destination offerings. They were divided into six groups, i.e. determinants of competitiveness:
1. inherited resources - include indicators that are represented in the survey questions from 1 to 9, for example: climate attractiveness, cultural and artistic heritage, historical sites, etc.
2. created resources - include indicators that are represented through the survey questions 10 to 33, such as offer of sports, adventure and recreational facilities, accommodation, transport infrastructure, etc.
3. supporting resources - include indicators that are presented in the questionnaire from question 34 to 45, for example: telecommunication system, customs and immigration offices, etc.
4. situational conditions - include indicators that are represented in the survey questions 46 to 70, and include factors such as political stability, cooperation between the public and private sector, the development and promotion of new tourism products, etc.
5. destination management - includes indicators that are represented in the survey questions 71–81, such as: co-operation between the public and private sectors in the field of hospitality and tourism education, the growth of foreign investment in tourism development activities, recognizable brand, etc.
6. demand conditions - include indicators that are represented in the survey questions 82-85, encompassing the entire image of the destination, international awards for product destination, destination products and compliance needs of tourists and international awards for our destination.

Inherited, created and supporting resources include various destination features that make the destination attractive to visitors. Destination management implies the factors that increase the attractiveness of resources, enhancing the quality of supporting factors, and it includes the organization's destination management, marketing management, development guidelines, planning, human resource development and environmental management. Demand conditions consist of three main elements of tourism demand: awareness, perceptions and preferences.

Subjects stated indicators rate from 1 to 5, where: 1 - below average, 2 - slightly below the average, 3 - average, 4 - slightly above the average, 5 - well above average.

Correlation analysis tested the relationship between the power of the brand and scores of major competitiveness, represented with inherited and built resources, supporting facilities, situational conditions, destination management and demand conditions. Power brand is defined by two categories - below average (grades 1 and 2), and (above) the average score of brand recognition (grades 3, 4 and 5). The result of such categorization is the distribution of the brand score. Out of the total number of respondents 88% evaluated the brand with grades 2 or 3. Pursuant to dichotomously defined variable of brand, the "point biserial" correlation coefficient was used, during the correlation analysis, as a special case of the Pearson correlation coefficient, when one variable is continuous and the other dichotomous.

Indicators whose scores showed statistically significant association with defined categories accounted for variables in the logistic regression. Given that indicators are ordinal variables, the Kruskal-Wallis test was used to determine the significance of individual indicators. Significance of Kruskal-Wallis test indicates the existence of differences in the distribution of indicator values between the two observed categories. This means that one distribution is shifted to the right, and generally contains higher ratings of indicators than in the second category. All indicators that had significant value were input variables in multivariate analysis, and logistic regression. When groups of indicators were compared, the traditional significance level of 5% was used, whereas when single indicators were compared to the grouped ones the level of significance of 10% was used in order to encompass a greater number of (potentially) important indicators as well as their interactions.

The impact of destination management on creating the brand and the image of the Kvarner tourist destination was estimated using logistic regression. When assessing the impact of destination management and brand image, indicators of the observed competitiveness group were used in choosing independent variables, in order to gain a deeper insight into the impact of destination management on destination brand and image. All initial indicators were analized, not only those that were left after the Cronbach alpha correction, except for the brand in the case when it represented the dependent variable. The dependent variable is dichotomous, i.e. the categories defined with below average and (above) the average evaluations of brand image were observed. The brand, which is an integral part of the destination management group of indicators was defined with the variable "Development of a distinctive destination brand", and was excluded from the definition of the numerical indicators of competitiveness due to elimination during the process of reliability analysis, i.e. during the correction of Cronbach alpha coefficient, which ensured an independent comparison with other indicators without affecting the basic model.

Numerical indicators, i.e. evaluation groups were defined as the arithmetic mean of the corresponding indicators of a specific competitiveness group, and they presented a summarized evaluation of a certain group. Indicators that have proved superfluous in the analysis of reliability, i.e. those that impacted on reducing the Cronbach alpha coefficient were excluded from the calculation.

5 RESULTS OF THE EMPIRICAL RESEARCH
In this paper, the following hypothesis was tested:

H1: Implementation of integrated factors of destination management is a prerequisite for creating a recognizable brand of the Kvarner tourist destination.

Enterprise in Turbulent Environment

Kruskal-Wallis test was used to examine the differences in the distribution of individual indicator scores between the two brand categories that were defined with a below average and above averagescore, and the analysis of differences in the distribution of grades is shown in Table 1.

Table 1: Analysis of differences in the distribution of factor grades between the two categories of brand (authors' research)

Set of indicators: **Destination management**	
Variable	p-value
p51	0,865
p52	**0,007**
p57	**0,006**
p60	0,293
p61	0,312
p62	0,705
p63	**0,059**
p64	**0,016**
p65	0,621
p66	0,314
p67	**0,001**
p68	0,318
p69	0,651
p70	0,507
p71	0,466
p72	0,822
p73	0,865
p74	0,486
p75	**0,001**
p77	**0,001**
p78	0,663
p79	0,181
p80	0,584
p81	**< 0,001**

Statistically significant difference, at a significance level of 10%, in the distribution of grades for certain indicators of destination management between the observed brand categories (below average / (above) average grade) was detected in the following indicators:
1. p52   the private sector recognizes the importance of sustainable development,
2. p57   the entrepreneurial ability of the local tourism sector,
3. p63   a vision of a destination as a reflection of tourists' evaluations,
4. p64   a vision of a destination as a reflection of the local community evaluations,
5. p67   the development and promotion of new tourism products,
6. p75   educational structure adapted to the occupations in tourism,
7. p77   the growth of foreign investment in tourism,
8. p81   reputation of the tourist boards.

These variables, that exhibited a univariate association with the brand, make the initial input for the logistic regression. After including other variables in the model, as described in the

specification, a model is obtained where the probability is modeled BRAND = 1, i.e. that it is evaluated as (above) average when compared to the competition.

This model that presentes the impact of (other) indicators of destination management on to the (above) average rating of the brand shows means that most influencal variable is P81 - reputation of tourist boards. If their reputation score increases by a unit, the odds that the destination brand's score will be (above) the average, relative to its main competitors, increases almost nine times (OR = 8.6). Table 2 shows the results of the logistic regression of destination management factors that influence the destination brand.

Table 2: Results of the logistic regression of destination management factors that influence the destination brand (authors' research)

Variable	Estimate	Standard error	χ^2	Odds ratio			p-value
				Estimate	95% confidence interval (Waldo)		
Constant	-12,473	2,471	25,471				< 0,001
p57	0,865	0,453	3,646	2,375	0,977	5,773	0,056
p67	0,916	0,494	3,433	2,499	0,948	6,582	0,064
p75	0,594	0,341	3,032	1,811	0,928	3,534	0,082
p81	2,148	0,541	15,777	8,567	2,968	24,723	< 0,001
Coefficient of determination R^2	Likelihood ratio						
0,477	< 0,001						

The following indicators have a statistically significant impact on brand recognition: p57 - the entrepreneurial ability of the local tourism sector (OR = 2.4), p67 - the development and promotion of new tourism products (OR = 2.5) and p75 - educational structure is adjusted to occupations in tourism (OR = 1.8); a better evaluation of these indicators increases the odds for an (above) the average score of the brand.

Results of the research indicate the acceptance of the developed hypothesis (H1) according to which which the implementation of destination management elements is a prerequisite for creating a recognizable destination brand of the Kvarner region as one of the most successful Croatian tourist regions.

6 CONCLUSION

Tourism destination management should be perceived as a management system that contains multiple segments (economic, political, environmental, technological, demographic and social). To accomplish this objective, different types of destination management are introduced. Strength of the brand, and previous perceptions of potential visitors, have an increasingly important role in choosing a destination to visit. It can be said that the sales of a tourism product have attained a new dimension in which the focus is on the customer or visitor and his perception, thus the choice of a destination is pre-destined.

Brand management is an integral part of destination management because every business decision made by the destination managers as well as their success or failure will be reflected on the overall destination brand. Good or bad decisions affect the image of the destination, through the perception of the community, or the visitors. If the destination managers do not accept the role of brand managers and manage the brand, the brand will probably continue to

develop in an unwanted direction. Therefore, the management of destination has to indeed take care about the destination image in the public and manage the process of branding, in order to communicate the wanted image and consequentially influence public awareness and create a strong brand.

The model of destination management indicators shows that the reputation of tourist boards has the most significant impact on the above average rating of the brand. If their reputation score increases by a unit, the odds that the destination brand's score will be (above) the average, relative to its main competitors, increases almost nine times.

Entrepreneurial ability of the local tourism sector, the development and promotion of new tourism products and the adapted educational structure have a statistically significant and positive impact on brand recognition and are the local tourism sector, adapted occupations in tourism, i.e. their evaluation increases the chances for an above average score of the brand, which indicates the acceptance of the corresponding hypothesis (H1) according to which the existence of destination management factors that influence the brand recognition of the Kvarner tourist destination.

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VALUE RELEVANCE OF BANKS: EVIDENCE FROM CROATIA

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ABSTRACT
The purpose of this paper is to analyze value relevance of accounting information for Croatian banks. Most of researches conducted in the area of value relevance are focused on nonfinancial companies and therefore it is interesting to analyze are accounting information published in bank's financial statements value relevant. The usefulness of accounting information in the process of decision making is also examined through value relevance analysis and information about usefulness and quality of bank's financial statements are interesting not only to investors on the capital markets but also to bank supervisors. A value relevance analysis was conducted by using F-O valuation framework. According to F-O model market value of a company can be expressed as a function of accounting information, i.e. earnings and book value. In this research authors analyzed the value relevance of banks whose shares were listed on the Croatian capital market at the end of 2011. In 2011 Croatian banking sector consisted out of 32 banks but only 12 banks were traded on Zagreb Stock Exchange. Therefore research was limited only on a sample of 12 banks, meaning that sample included 37.5% of banks that operated in the Republic of Croatia at the end of year 2011. Research results indicate that book value was positively and significantly related to share prices while earnings were not related to share prices. More precisely, regression coefficient on book value amounted 0.617 (sig. 0.0001) and regression coefficient on earnings was 0.359 (sig. 0.586). Generally observed, it can be concluded that accounting information published in financial statements of banks are value relevant, i.e. related to share prices since regression model was significant as a whole (sig. 0.0001). Total explanatory power of accounting information measured through coefficient of determination amounted 97.3%.

Keywords: Accounting information, Banks, Value relevance

1 INTRODUCTION

Value relevance studies present a line of research which analyses the usefulness of accounting information in the process of decision making. Namely, accounting information is considered value relevant if it is associated with share prices. If this relationship does not exist it can be concluded that accounting information are not value relevant or that financial statements do not meet one of its primary goals. In the literature the concept of value relevance is defined in different ways. According to Beaver (2002) accounting information is value relevant if it is associated to market value of equity (with shares or returns). Similarly, in Barth et al. (2001) it is stated that "*value relevance studies examine association between accounting information and market variables*". Value relevance studies represent the most productive area in accounting research in the last 30 years and they are conducted in most of developed

countries. Anandarajan et al. (2011) consider that this growth in international importance of value relevance studies is motivated by two key factors. As a first factor authors specify the increased globalization of financial markets which resulted in a movement towards international standardization of accounting practices. As second factor, they state that the significant increase in international investments has necessitated the need for more reliable and informative financial statements on a global basis. In recent years in the area of value relevance research focus is on comparing the value relevance of accounting information among different countries and on determining the factors that cause the observed differences.

This research is, unlike most of the other papers in this area, focused on the analyses of value relevance of financial institutions, more precisely, banks. In fact, in most of the value relevance studies, authors excluded financial institutions from the sample because of the specificities of their operations and, to our best knowledge, until today there is no value relevance studywhich analyzed the value relevance of Croatian banking system. Banks play extremely important role in financing corporations and the overall economy and therefore the analyses of usefulness and quality of bank's accounting information certainly has significance. It should be noted that value relevance analyses for the financial institutions, or more precisely for banks, is relevant not only to investors but also to bank supervisors whose interest is to tighten market discipline by reinforcement disclosure and transparency requirements.

Paper is divided in four sections. The introductory part is followed by literature review from the value relevance area. Third part of the paper shows results of empirical research conductedon a sample of Croatian banks. Last part of the paper brings concluding remarks.

2   LITERATURE REVIEW

A large number of value relevance studies that were conducted in the last 20 years have its origin in different corporate governance systems. Authors consider that differences in corporate governance systems cause differences in value relevance among different countries. As examples of studies where differences in value relevance are explained by different institutional and legal frames studies performed by Ali and Hwang (2000), Ball, Kothari and Robin (2000), Black and White (2003) can be pointed out. Ali and Hwangcompared value relevance of accounting information for 16 countries in the period from 1986 to 1995 in order to determine differences in the value relevance between countries that belong to continental or to Anglo-Saxon model of corporate governance. Research results have shown that value relevance of accounting information is lower in countries that belong to continental corporate governance system and which are characterized by a strong bank orientation in raising external capital.

Influence of differences in corporate governance systems on the quality of accounting earnings was analyzed by Ball, Kothari and Robin (2000). Authors conducted research on four countries that belong to Anglo-Saxon corporate governance model (Australia, Canada, USA and United Kingdom) and on three countries that belong to continental corporate governance model (France, Germany, Japan). Finally, the sample consisted of more than 40.000 observations in the period 1985–1995. Authors analyzed two important characteristics of accounting earnings (conservatism and timeliness) and research results have shown that timeliness is higher in countries that belong to Anglo-Saxon corporate governance model.

Black and White (2003) compared value relevance of book value and earnings in Germany, Japan and USA. Research results show that value relevance of book value is higher than value relevance of earnings in Germany while the results are less robust for Japanese companies.

More precisely, for Japanese sample book value is more value relevant than earnings only in the case of companies that reported negative earnings. Results also show that value relevance of earnings is higher than value relevance of book value for the sample of USA companies. Second stream of research is based on comparing value relevance of accounting information prepared according to different accounting standards. As examples of such studies papers of Arce and Mora (2002) and King and Langli (1998) can be pointed out. Arce and Mora performed a research on a sample of corporations from 8 European countries. Research results have shown that it can not be concluded that accounting information are more value relevant in market orientated systems than in bank orientated systems although it is noted that book value and earnings have different roles in valuation of a company. King and Langli conducted comparative value relevance analyses on the capital markets of Germany, Norway and United Kingdom. Results have shown that accounting information are value relevant in all three observed markets. Also results have shown that accounting information are the least related to share prices in Germany (R^2 amounts 40%), the best relation with share prices was evidenced for UK capital market (R^2 amounts 70%) and explanatory power of the accounting variables in Norway was 60%.

As third line of value relevance studies cross time value relevance studies can be pointed out because of their significance in the value relevance literature. Study performed by Devalle et al. (2010) can be pointed out. Authors analyzed whether the value relevance of accounting information has increased after implementing International Financial Accounting Standards as mandatory for preparation of consolidated financial statements. Research results have shown that influence of earnings on share prices has increased after IFRS implementation in case of Germany, France and United Kingdom while impact of book value was decreased in all the analyzed countries except United Kingdom.

As separate line of value relevance research studies dealing with value relevance of banks can be pointed out. Example of such studies are papers written by Agostino, Drago and Silipo (2011) and Anandarajan, Francis, Hasan and John (2011). Agostino et al. (2011) measured value relevance in the European banking industry before and after the adoption of IFRS. The aim of the paper was to determine whether the mandatory application of IFRS increased the value relevance of accounting information to the prices of bank shares in the European Union. Research results have shown that IFRS introduction enhanced the information content of both earnings and book value for more transparent banks. Also, authors came to result that less transparent entities did not experience significant increase in the value relevance of book value.

Anandarajan et al. (2011) focused only on financial firms in 38 countries during 1993–2004. Sample included 813 banking institutions and research results have shown that, on the macro-level, value relevance was affected by "Transparency" or disclosure requirements of a country's standards boards. More precisely, authors came to conclusion that the value relevance was more significant in countries were greater disclosure of financial information was required. Also, one of the conclusions was that value relevance is influenced by who sets the standards, meaning that value relevanceis greater when there is a local environment which is more focused on the private sector and the legal environment is opeded and friendly to shareholders. According to this research, at the bank level, the organizational form and risk had the most impact on the value relevance of banks.

3 VALUE RELEVANCE OF BANKS: EVIDENCE FROM CROATIA

3.1 Sample and research model

The purpose of this paper is to analyze the value relevance of accounting information for Croatian banks whose shares are listed on the Zagreb Stock Exchange. At the end of 2011 Croatian banking sector consisted out of 32 banks but on the Zagreb Stock Exchange data on share prices were available only for 12 banks. Therefore research was limited on a sample of 12 banks meaning that sample included 37.5% of banks that operated in the Republic of Croatia at the end of 2011. Descriptive statistics for the banks included in the sample is shown in table 1. Table 1 provides information about number of banks included in the sample, mean and standard deviations of market value per share, earnings per share and book value per share.

Table 1: Descriptive statistics

	Mean	Std. Deviation	N
P	370,0233	525,04774	12
EPS	20,7100	50,58683	12
BVPS	582,8625	823,16531	12

Table 2 provides information on correlations between variables included in the regression model. In multiple regression models, where regression coefficients reflect partial influence of one influencing variable on the dependent variable when other influencing variables are constant, assumption that regression variables are independent should be fulfilled. In a situation when this assumption is not fulfilled there is a problem of colinearity among two, or the problem of multicollinearity among more regression variables. In practice perfect multicollinearity is very rare, but strong or very strong multicollinearity is not that rare (Gujurati, 1992). According to expectations, in the observed regression model earnings and book value are positively and statistically significantly correlated among each other, andthey are also significantly related to share prices.

Table 2: Correlation ^{a} among variables in the sample

Variable	P	EPS	BVPS
P	1,000	0,606	0,989
EPS	-	1,000	0,590
BVPS	-	-	1,000

^{a} *All correlation coefficients are significant at 1% level.*

Since colinearity among regression variables was noted in order to test multicollinearity problem variance inflation factors (VIFs) were analyzed. In order to test the multicollinearity problem, statistical package SPSS, which was used in this research, applies variance inflation factors, so called VIFs. If VIFs are less than 5 it can be concluded that multicollinearity is not a significant problem, but however some authors consider that VIFs can be up to 10 and that multicollinearity is still not considered as a significant problem. Although there is a correlation among independent variables in the observed regression model the multicollinearity problem is not significant (Table 4). More precisely, since none of the VIFs is higher than 5 (VIFs equal 1.534), it can be concluded that in the observed regression model multicollinearity is not a significant problem.

In this research authors analyzed the value relevance of accounting information of Croatian banks, i.e., the relation between accounting information and share prices for banks whose shares were listed on the Zagreb Stock Exchange at the end of 2011. This research contributes to the existing valuerelevance literature since to our best knowledge there is no similar research on the value relevance of Croatian banks. The aim of this research was to test the following hypothesis:

H: Accounting information prepared and published by Croatian banks are value relevant.

Operative approach in testing value relevance of accounting information has basis in Feltham-Ohlson valuation framework (furthermore F-O model). According to F-O model the market value of the firm can be expressed as linear function of its book value and discounted expected abnormal earnings (Feltham, Ohlson, 1995; Ohlson 1991). So, in this study, authors express value relevance of accounting information as a function of earnings and book value as follows:

$$P_{i,t} = a_0 + a_1 E_{i,t} + a_2 BV_{i,t} + e_{i,t} \qquad (1)$$

Where:
$P_{i,t}$ – stock price at the end of year t
$E_{i,t}$ – earnings per share during year t
$BV_{i,t}$ – book value per share at the end of year t
$e_{i,t}$ – other value relevant information in year t.

3.2   Empirical findings on the value relevance of banks in Croatia

As previously mentioned value relevance analysis for the Croatian banking sector was conducted on a sample of 12 banks whose shares were listed on Zagreb Stock Exchange in 2011. In performing value relevance analysis, consistent with previous research in this area (Black and White, 2003, Ali and Hwang, 2000), we examined value relevance by drawing conclusions from the explanatory power of models statistics (R square) and by drawing conclusions from the significance of the model as a whole and also from the significance of regression coefficients of the variables included in the research. A conducted value relevance analysis indicates that accounting information of Croatian banks are value relevant, i.e. related to share prices. Namely, as it is shown in table 3 developed and tested regression model is significant as a whole (sig. 0,0001) and based on the model's significance it can be concluded that bank's accounting information are value relevant.

Enterprise in Turbulent Environment

Table 3: Model's significance

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2965557,885	2	1482778,942	199,571	,0001[a]
	Residual	66868,543	9	7429,838		
	Total	3032426,428	11			

a. Predictors: (Constant), BVPS, EPS

b. Dependent Variable: P

Further analysis of regression coefficient has revealed that book value is positively and significantly related to share prices while earnings are not. More precisely, regression coefficient on book value equals 0.617 (sig. 0.0001) which indicates a high degree of association and it can be concluded that book value is highly significant in explaining changes in market value. Regression coefficient on earnings equals 0.359 (sig. 0.586) and it can be concluded that earnings, when observed individually are not significantly related to share prices in the Croatian banking sector.

Table 4: Parameter estimates and odds ratios for the model

Model		UnstandardizedCoefficients		Standardized Coefficients			CollinearityStatistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	Constant	2,669	30,949		,086	,933		
	EPS	,359	,636	,035	,565	,586	,652	1,534
	BVPS	,617	,039	,968	15,793	,0001	,652	1,534

In the context of value relevance analysis special attention is on analyzingthe determination coefficients because these coefficients represent the explanatory power of the model and measure the value relevance of accounting information.

Table 5: Explanatory power of developed model

Model	R	R Square	Adjusted R Square	Stid. Error of theEstimate	Durbin-Watson
1	,989	,978	,973	86,19651	1,868

For the observed model R square equals 97.8% and the adjusted R square amounts 97.3% which indicates very high explanatory power of the model. So, according to the research results explanatory power of the model equals 97.3% meaning that accounting information explain 97.3% of share prices of Croatian banks. As it can be seen value relevance is quite high but however when interpreting this research results one should have in mind relatively small sample of banks included in this research since different sample might result in differentvalue relevance of bank accounting information.

4 CONCLUSION

Accounting information published in financial reports are the primary source of publicly available information about company's performance and thereby transparent financial reporting is an essential prerequisite for efficient functioning of capital markets. The accounting information usefulness approach is emphasized both in theory and practice of financial accounting and value relevance studies represent stream of research in which relation between accounting information and share prices is analyzed. The literature of value relevance is increasingly getting attention in the international contex (Ali and Hwang, 2000) but it is important to emphasize that most of the researches are limited to manufacturing and non-financial firms. Actually, financial institutions were in most of the cases excluded from the sample because of the specificities related to their business operations and process of financial reporting.

In this paper authors use F-O valuation framework in order to test the value relevance of Croatian banks. According to F-O model market value of a company can be expressed as a function of accounting information, i.e. earnings and book value. Sample included 12 banks whose shares were listed on Zagreb Stock Exchange in 2011. Results of research conducted within this paper confirmed the research hypothesis and have shown that accounting information of Croatian banks are value relevant, i.e. related to share prices. More precisely, regression model was significant as a whole and the total explanatory power for the tested model amounted 97.3%. Furthermore, research results indicate that book value was positively and significantly related to share prices while earnings were not related to share prices. Regression coefficient on book value amounted 0.617 (sig. 0.0001) and regression coefficient on earnings was 0.359 (sig. 0.586).

In the end it should be noted that although accounting information of Croatian banks are found to be value relevant, when interpreting research results one should have in mind relatively small number of banks included in the sample. Small number of banks in the sample is one of the limitations of conducted research but itis result of quite small liquidity of banks shares on the Croatian capital market. However, to our best knowledge this is first attempt of determining the value relevance of accounting information for Croatian banks and it is important to emphasise need for further investigation in this area in order to get more robust information on value relavance of banks but also to get better insight in factors that affect bank's accounting information quality, transparency and in the end factors that affect value relavance of banks.

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INTEGRATION OF THE HUMAN RESOURCE FUNCTION AND THE STRATEGIC BUSINESS PLANNING PROCESS: CASE OF COMPANIES IN SERBIA

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ABSTRACT
The success of company strategic management greatly depends about the integration level of human resource function in the process of business strategic planning. This means that managers and professionals from the human resource department should be integrated into the process and team for strategic planning. In the strategic process planning human resource managers should:
  a) be involved in strategic plan construction in all the question of human resources and in the implementation of strategic choices in the company;
  b) know stategic goals of the company;
  c) know which kind of skills, behaviours and attitudes of employees are needed as the support to the strategic plan of the company;
  d) develop programs which will ensure that employees realy have needed skills, behaviour and attitudes as a support for company strategic realization.
Regarding that basic questions of business strategy are where, how and wherewith compete, the good answer on this questions suppose that human resources are key strategic and competing factor. Because of that top management of the companies beyond team for strategic planning should engage not only the formal team for strategic planning, but also human resource management function with its management and professionals. This paper research the tipes of connections of strategic and human resource management in company praxis of Serbia on the sample of 212 companies. It answer on the question about the connection tipe between human resource management and strategic planning, is this connection on the administrative, one-way, two-way or integrated level. By means of questionnaire research method applied to managers on all management levels (top, middle and lower) are obtained interesting results in the area of integration of the human resource management and the business strategic planning on the case of Serbia.

Keywords: Business excellence, Formulation and implementation of business strategy, Human resource management, Strategic management of human resources, Strategic planning

Week leadership can wreck the soundest strategy; forceful execution of even a poor plan can often bring victory.
Sun Zi

1 INTRODUCTION
The choice of strategy consists of answers related to the competition, i.e. the way in which a company is going to compete in order to accomplish its mission and goals. Strategic decisions consist of answers to questions where, how and with what to compete. Strategic management is an approach to reacting to competition, and it deals with a range of decisions such as: how

to frighten the competition, how to weaken the competition, how to react and influence laws not yet passed, how to treat different and specific interest groups, how to reduce production costs, how to increase income, which technology to use and how many and which type of people to hire. All of this represents competitive challenges which must be considered. Strategic human resource management is a model of planned distribution of human resource which should enable a company to achieve its goals (Noe et al., 2006, p. 43). All systems in a company are managed by people, thus strategic human resource management requires engaging right (skilful) employees in the right place at the right time and developing a motivational system which would harmonize the behavior of employees with the company's strategic goals (Bogdanović, 2010, slide 20). The success of strategic management greatly depends on the degree of involvement of a company's human resource management (HRM) function, so HRM has a key role in defining and implementing the business strategy, but also business strategy has an impact on the HRM strategies and programs (Bahtijarević-Šiber, 1999, p. 122). By means of HRM can be achieved concurrent and strategic advantage, because no other resource, except human resource has this power (ability) to create new products and services (Bogdanović and Zelenika, 2011, p. 364). Implementing strategy includes eight (8) important activities: building a capable organization, steering ample resources into strategy-critical activities and operating units, establishing strategy-supportive policies, instituting best practices and programs for continuous improvement, creating internal support systems to enable better execution, employing appropriate motivational practices and compensation incentives, creating a strategy supportive corporate culture and exerting the internal leadership needed to drive implementation forward (Thompson and Strickland, 1998, p. 334) what can not be effectively achieved without tight cooperation between sound strategy and HRM. A very common problem in strategy realization is the lack of adequate labor force, because every part of the process of managing a company involves issues related to people. Therefore, a certain level of connection between human resource management and strategic planning is needed in order to achieve harmony between strategy and realization. The higher the level of that harmony is, the closer the company is to achieving business excellence. An American research on 115 strategic business units which belong to 500 companies from a Fortune magazine's list has shown that there is a certain level of connection between human resource management and the strategic planning process in between 49% and 69% of companies (Martell and Caroll, 1995; referenced by Noe et al., 2006, p. 45). The concept of Human Resource Management was created under the auspices of the British social services at the beginning of the twentieth century, who cared for the workers welfare (Živković, 2012, p. 161). HR managers are becoming more and more involved in formulating and implementing strategy in their organizations, because it has become understood that the key elements of organizational success are: mission and strategy, organizational structure and HRM, which requires their close connection. HRM thus becomes the main protagonist in strategic plans development, and organizational and human resource plans and strategies are inextricably linked (Ivanchevic, 1994, p. 7). The levels of this connection can be different, thus it is important to understand the connection. Literature regarding strategic human resource management (Noe et al., 2006, pp. 45–47; Golden and Ramanujam, 1985, pp. 429–451) makes a difference among four basic forms of the connection:

a) *Administrative connection* (the lowest level of integration). The attention of the HRM function is directed at daily activities. Human resource management has neither time nor an opportunity to deal strategically with the issues of human potential. A company's strategic planning function exists without any input from the human resource department. The HRM department is completely separate from any part of the strategic management process, from strategy formulation as well as from its

implementation. The HRM department deals with administrative issues that have nothing to do with the company's key (strategic) business needs.

b) *One-way connection*. The function of strategic business planning is developing a strategic plan after which the HRM function is informed about it. Human resource issues are not considered when formulating a strategic plan. Strategic plans that a company cannot implement successfully are often a consequence of this level of integration.

c) *Two-way connection*. Human resource issues are considered when formulating a strategy in three steps. Firstly, the strategic planning team informs the HRM function about different strategies the company is considering. Secondly, after that, HRM analyzes the influence of different strategies on human resource. Finally (thirdly), after a strategic decision, the strategic team delivers a strategic plan to the HR management which is to develop programs for its implementation. The strategic planning function and the HRM function are interdependent here, though HRM is not directly involved in strategy formulation but only in its implementation.

d) *Integrated connection*. This connection is based on a constant rather than sequential interaction. A HR manager is a member of the senior managers team (the strategic team). The HRM function is involved in both strategy formulation and its implementation. The HR management provides strategic planners with data regarding the company's human resource abilities, where the abilities mentioned are a result of the company's HRM system. In accordance with the human resource abilities, the best strategy is chosen and human resource practice is organized in a way to motivate employees' performance.

This paper researches the problem of connection (integration) between strategic planning and the HRM function on a sample of companies of the Republic of Serbia. The goal of the research is to establish the level of the connection, whether it is at the level of an administrative, one-way, two-way or integrated connection. Furthermore, it researches whether there are statistically significant differences in answers among different manager levels (top, middle, lower) as well as between HR managers and other sector managers.

2 THE METHOD

Using a questionnaire related to the integration between strategic business planning and the human resource management function (adapted according to Golden and Ramanujam, 1985 – see the annex), the management in 212 companies in the Republic of Serbia was surveyed anonymously (in the period from 8th to 10th month of 2012).

Answers to questions in the main part of the questionnaire were offered in two categories (yes, no), and the examinee was to circle what, in his/her opinion, referred to the statement in question. In addition, the questionnaire consisted of open questions regarding the level of management (top, middle, lower) and the jurisdiction sector. One manager was surveyed in each of the 212 companies. Completed questionnaires were returned to the researchers.

The sample structure included 75 top managers, 79 middle managers and 38 lower managers, in total 212 surveyed managers in 212 companies in the Republic of Serbia. Out of the given sample (N=212), 17 managers were employed directly as HR managers while the other 195 were employed as managers in other company sectors.

3   RESULTS AND A SHORT DISCUSSION OF RESEARCH RESULTS

The first step established the levels of connection between the HRM function and strategic planning (plan and execution), while the second established differences in answers regarding the management level (top, middle, lower) and the sector role (the manager of the HRM sector and other managers).

Table 1: Administrative connection between the HRM function and strategic planning (SPSS ouput)

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
V1	Group 1	0	207	.98	.50	.000[a]
	Group 2	1	5	.02		
	Total		212	1.00		
V2	Group 1	0	207	.98	.50	.000[a]
	Group 2	1	5	.02		
	Total		212	1.00		
V3	Group 1	0	191	.90	.50	.000[a]
	Group 2	1	21	.10		
	Total		212	1.00		
V4	Group 1	0	153	.72	.50	.000[a]
	Group 2	1	59	.28		
	Total		212	1.00		

a. Based on Z Approximation.

It is clear from the given table 1, considering the answers (1=yes, 0=no), that the majority of examinees' (managers') answers lead to the conclusion there is not only an administrative connection between the HRM function and strategic planning in their company. A statistically significant difference was established between answers yes and no (p=0.000) for all four variables measuring the given connection (v1= HRM activities in the company are mostly of administrative nature; v2= HRM activities have nothing to do with the key business needs of the company; v3= strategic planning exists without any input from the HRM department; v4= our HRM department deals mainly with daily operational activities), thus a conclusion can be reached regarding the direction of the non-existence of an exclusive administrative connection between the HRM function and strategic planning in companies of the Republic of Serbia.

Table 2: One-way connection between the HRM function and strategic planning
(SPSS ouput)

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
V5	Group 1	0	188	.89	.50	.000[a]
	Group 2	1	24	.11		
	Total		212	1.00		
V6	Group 1	0	175	.83	.50	.000[a]
	Group 2	1	37	.17		
	Total		212	1.00		

a. Based on Z Approximation.

In the area of the one-way connection, table 2 presents tested variables (v5= notification concerning the strategic business plan, the HRM sector receives only the final information; v6= the HRM sector receives the finished strategic business plan, but is not involved in its creation). It is visible from the table that the majority of answers to given questions are no=0, with statistically significant differences between answers yes and no, which implies that companies' managers perceive that the connection between strategic planning and HRM is above the one-way connection.

Table 3: Two-way connection between the HRM function and strategic planning
(SPSS ouput)

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
V7	Group 1	1	209	.99	.50	.000[a]
	Group 2	0	3	.01		
	Total		212	1.00		
V8	Group 1	1	190	.90	.50	.000[a]
	Group 2	0	22	.10		
	Total		212	1.00		
V9	Group 1	1	192	.91	.50	.000[a]
	Group 2	0	20	.09		
	Total		212	1.00		
V10	Group 1	1	190	.90	.50	.000[a]
	Group 2	0	22	.10		
	Total		212	1.00		

a. Based on Z Approximation.

Similar results were received in the area of the two-way connection between HRM and strategic planning, i.e. variables: v7= regularly inform the HRM sector regarding different business strategies the company is considering; v8= human resource managers consider the influence of different business strategies on human resource and present their results to the strategic planning team; v9= after the decision on the business strategy, the plan is delivered to a HR manager who develops programs for its implementation; v10= business planning

functions in the company are interdependent (one influences the other and vice versa). Most of the examinees in companies stated that the connection between HRM and strategic planning is at this two-way level of connection.

Moreover, the goal was to determine whether the connection between the HRM sector and strategic planning is at the highest level, i.e. at the level of the integrated connection which the following table presents.

*Table 4: Two-way connection between the HRM function and strategic planning
(SPSS ouput)*

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
V11	Group 1	1	189	.89	.50	.000[a]
	Group 2	0	23	.11		
	Total		212	1.00		
V12	Group 1	1	137	.65	.50	.000[a]
	Group 2	0	75	.35		
	Total		212	1.00		
V13	Group 1	1	197	.93	.50	.000[a]
	Group 2	0	15	.07		
	Total		212	1.00		
V14	Group 1	1	211	1.00	.50	.000[a]
	Group 2	0	1	.00		
	Total		212	1.00		

a. Based on Z Approximation.

Similar results to those in previous connection researches were received when researching the integrated connection where most examinees believe the highest level of connection between HRM and strategic planning is present in their companies (variables v11= a HR manager is a member of the senior (top) management team; v12= the process of formulating strategy and the process of its implementation in our company cannot happen without intensive involvement of the HRM sector; v13= a human resource manager provides strategic planners with the key data regarding human resource abilities, which helps choose the best possible business strategy; v14= the practice of HR in the company is organized in a way to motivate the success of individual employees as well as the function of work teams.

The only exception is variable v12= the process of formulating strategy and the process of its implementation in our company cannot happen without intensive involvement of the HRM sector (35% of answers were opposite the general tendency of the highest level of connection between the strategic plan and execution), which, at least in this area, opens the question of whether the given answers in this research were really meant by the management or whether they were largely moulded by social desirability.

Two control questions, v15= before a strategic business choice, strategic planners consider all business questions related to human resource and v16= employees in a company are the key

means for maintaining competitive advantage, confirmed the conclusion mentioned above, as can be seen in table 5.

Table 5: Strategic significance of human resource in companies of the Republic of Serbia (SPSS ouput)

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)	Exact Sig. (2-tailed)
V15	Group 1	1	153	.72	.50	.000[a]	.000
	Group 2	0	59	.28			
	Total		212	1.00			
V16	Group 1	1	211	1.00	.50	.000[a]	.000
	Group 2	0	1	.00			
	Total		212	1.00			

a. Based on Z Approximation.

Question v15 referred to the direct productive and operational connection between a company's work teams and its strategic choice, therefore the direct connection between the plan and execution (28% of companies stated that this is not characteristic of their companies, which is a relatively small percentage when it is known that companies in the Republic of Serbia are not at the world's level of competitiveness).

The given results could lead to a non-critical conclusion that there is an exceptional connection (the integrated connection) in the companies of the Republic of Serbia between strategic business planning and human resource management, even better than it is the case in 500 companies from the Fortune magazine's list, which states that there is a certain level of connection between human resource management and strategic planning process in between 49% and 69% of companies (Martell and Caroll, 1995; referenced by Noe et al., 2006, p. 45).

Of course, results acquired in this manner should not be taken for granted, and the survey method used to question the management of concerned companies could be non-critically declared completely true as such if it were judged impeccable (without mistakes in measuring, i.e. if managers' answers could be treated as completely true and in accordance with the organizational reality). In testing praxis are known the terms of response bias, socially desirable responding, response distortion, overreporting which can be the problem also in psychological praxis (Richman et al., 1999; referenced by Fastić-Pajk, 2005, p. 6).

Namely, the management itself often provides socially desirable answers and distorted answers in accordance with its own specific motivation, especially in situations when given answers would not be in its favor or when it cannot control given answers. Results of a survey can often be 'thrown in the garbage' as examinees in certain researches do not provide true answers, namely in the research and cultural territory of the Balkans 'everyone lies' because it is the famous defense mechanism (Gotal; referenced by Brajša, 2012, p. 12) and a means to an end, even to survival. Naturally, a much better methodology would be for researchers' trustees to see the real situation in researched companies and provide true reports regarding given issues (measurement subjects), but such an approach requires a long and expensive research and not a single questioning of the management using a simple questionnaire.

Afterwards, examinees' answers were inspected taking into consideration the management level (1=top, 2=middle, 3=lower management), i.e. whether there was a difference in given answers considering the management level variable. For that purpose, the questionnaire dealing with the integration between strategic business planning and the HRM function was reduced to one variable (composite) as a linear combination of 14 variables and the testing of significance with post-hoc tests according to Scheffe was conducted (tables 6 and 7).

Table 6: Comparison of answers of all three management levels for the variables of integration between strategic business planning and the HRM function (SPSS ouput)

Management	N	Subset	
		1	2
1	95	7.6632	
3	38	7.7632	7.7632
2	79		8.1392
Sig.		.866	.133

It is visible that there is no statistically significant difference in answers among all three management levels seen globally as p=0.133.

Table 7: Post-hoc tests (multiple comparisons) of statistically significant differences between certain management levels (SPSS ouput)

(I) Manage-ment	(J) Manage-ment	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.4761*	.15606	.011	-.8608	-.0913
	3	-.1000	.19673	.879	-.5850	.3850
2	1	.4761*	.15606	.011	.0913	.8608
	3	.3761	.20234	.180	-.1228	.8749
3	1	.1000	.19673	.879	-.3850	.5850
	2	-.3761	.20234	.180	-.8749	.1228

1 - top management (N=95 managers in sample)
2 - middle management (N=79 managers in sample)
3 - lower management (N=38 managers in sample)

It is visible that between top management and middle management there is a statistically significant difference in answers at the level of p<0.05 (p=0.011), whereas between top management and lower management that difference is not statistically significant (p=0.879) and it is also not significant between middle management and lower management (p=0.180). The interesting finding mentioned is presented graphically in chart 1.

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Estimated Marginal Means of AL14
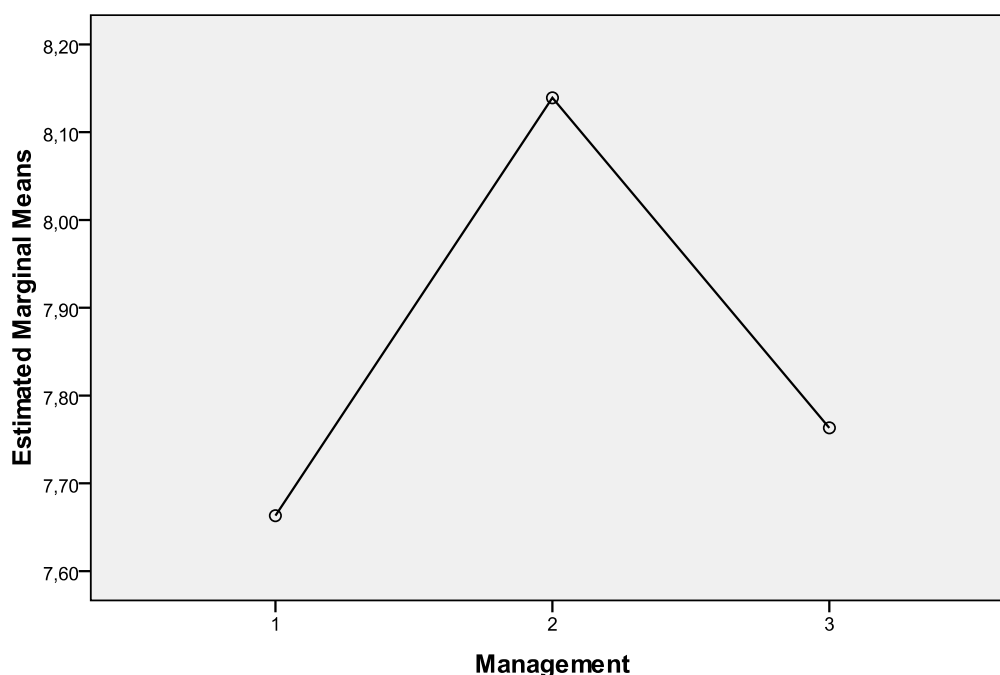
1= top management; 2= middle management; 3= lower management

*Chart 1: Statistical differences in answers from different management levels
(top, middle, lower) (SPSS ouput)*

Why the mentioned difference appeared is not totally clear, though a possible explanation is that middle management often serves as the 'buffer zone' between top and lower management and that precisely due to its double role it can have a different perception of organizational reality (Templar, 2011, p. XIII), as well as of the connection between strategic business planning and the HRM function of a company.

In this research, the appearance of a difference in the perception of human resource managers and other managers may also be interesting, thus the difference mentioned was examined by a one-way variance analysis precisely between these two categories considering the dependent variable of the connection between strategic planning and the HRM function.

Table 8: Statistical significance in answers from human resource managers and other managers (SPSS output)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.370	1	.370	.339	.561
Within Groups	229,385	210	1,092		
Total	229,755	211			

It is clear from the given table that there was not a statistically significant difference between the survey statements from human resource managers and their colleagues, managers of other sector provenance. The main reason for it is that actually all managers are human resource

managers as they are all to manage personnel in order to be successful (Buble, 2006, p. 358), and another reason is that human resource management is not yet such a differentiated discipline in the Republic of Serbia (which requires specific knowledge, special education and specialization) to have so much influence on the thoughts and perception of the managers mentioned in comparison with managers of general or some other provenance.

4   CONCLUSION

This paper researched the problem of connection (integration) between strategic planning and the HRM function on a sample of companies of the Republic of Serbia. The goal of the research was to establish the level of the connection, whether it was at the level of an administrative, one-way, two-way or integrated connection. Furthermore, it researched whether there were statistically significant differences in answers among different manager levels (top, middle, lower) as well as between HR managers and other sector managers.

It was established that the connection between strategic planning and the HRM function was at the highest (integrated) level, even though the results given should not be taken for granted as the survey method was adapted to the manager sample, which can provide distorted results due to the specific motivation of the manager personnel as well as the cultural milieu of the place the survey was conducted at (companies of the Republic of Serbia). Furthermore, it can be concluded from the findings that the strategic management process in companies of the Republic of Serbia is impeccable and that it is extremely well connected with execution (human resource management and especially human resource), which is difficult to believe considering the unrelatedness of the previously mentioned with the competitiveness level of companies of the Republic of Serbia.

There was inconsistency between answers from middle and top management (statistically significant difference), which can possibly be explained by the specificity of middle managers' position, the so called 'buffer zone' and which can influence this difference in perception, whereas the answers from top and low as well as those from middle and low were consistent (not statistically significant difference). HR managers' answers were consistent with the answers from other sector managers (not statistically significant difference), which can possibly be explained by the fact that there is no essential difference between HR managers and other sector managers in companies of the Republic of Serbia.

The given findings imply further research regarding the connection between strategic management and human resource management, especially in the direction of changed methodology, as the survey method (which has been expanding in recent years) does not seem to be able to provide reliable and scientifically valid and objective results any more.

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ANNEX 1: QUESTIONNAIRE REGARDING THE INTEGRATION BETWEEN STRATEGIC BUSINESS PLANNING AND THE HRM FUNCTION OF A COMPANY

1. HRM activities in our company are mostly of administrative nature. YES NO
2. The activities of the HRM department in our company do not have much to do with the company's key business needs. YES NO
3. Strategic business planning in our company exists without any input from the human resource department. YES NO
4. The human resource department in our company mostly deals with daily, operational activities. YES NO
5. Regarding the strategic business plan, the human resource department receives only the final information about the adopted plan. YES NO
6. The human resource department is not involved in the creation of the strategic plan, it receives the finished strategic business plan in order to execute it. YES NO
7. The strategic planning team regularly informs the HRM department regarding different business strategies the company is considering. YES NO
8. HR managers analyze the influence of different business strategies on human resource and present the results of these analyses to the strategic business planning team. YES NO
9. After a decision on the business strategy, the plan is delivered to a HR manager who develops programs for its implementation. YES NO
10. In our company, the function of strategic business planning and HR are interdependent (one influences the other and vice versa). YES NO
11. A HR manager is a member of the senior (top) management team (company administration). YES NO
12. The process of formulating strategy and the process of its implementation in our company cannot happen without intensive involvement of the HRM department. YES NO
13. A human resource manager provides strategic planners with the key data regarding human resource abilities, which helps choose the best possible business strategy. YES NO
14. The practice of HR in our company is organized in a way to stimulate the efficiency of individual employees as well as the function of work teams. YES NO
15. Before a strategic business choice, strategic planners consider all business (especially including production and operational) questions related to human resource. YES NO
16. The employees of our company consider themselves the strategic (key) means of sustainable competitive advantage. YES NO

Which management category in the company do you belong to?

a) Mainly executive (the highest management level – administration, mostly interacting with those occupying the lower or equal position in the hierarchy).
Please name the jurisdiction sector _____

b) Double role I (both an executive and a follower – middle management level)
Please name the jurisdiction sector _____

c) Double role II (more or equally a follower as an executive – lower management level)
Please name the jurisdiction sector _____

MAKING DECISION IN COMPANY DISMISSAL PROCESS

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ABSTRACT
Although all companies tend to develop and grow, the reality is also business contraction with necessity of firing company employees. This especially occurs during the global crisis and decreased demand for company goods and services that reduces company reproduction process. Therefore is employee reduction often the only solution for cost reduction and company survival. To minimize social costs, employee dismissal process should be managed fairly with all relevant criteria taken into account. Management of the company should rate actual workers performance, development potential or social criteria all objectively to get strong arguments for first selection and for making the final choice. Not all rated criteria are equally important in a specific moment so Analytic Hierarch Process is used to select and rank the employees that are taken into account for firing based on the importance of each criteria which is defined by company management. Human individuals cannot always be measured or valued by pure numbers, yet final result of this method precisely shows which candidates should be in focus for dismissal based on different information about each employee (actual performance, development potential or social criteria).

Keywords: AHP method, Dismissal criteria, Employees dismissal, Ranking, Saaty's scale

1 INTRODUCTION

In its lifetime company goes through different stages or phases. All business entities tend to grow, develop or decrease through these phases in general. Growth represents increase of material and human resources of the company (business enhancement, employment increase, revenue and profit increase or capacity increase), while development represents qualitative changes like new technologies, higher product/services quality, new markets, better quality structure of employees or higher business efficiency (Dvorski and Kovšca, 2011, pp. 378–379).

Reduction in business activities is connected with different strategies for resolving the problem surplus of employees by means of different options for regulating this problem (Buble, 2006, pp. 373–374). Although there are different strategies for resolving the employees surplus (e.g. job sharing, shortening the working time, non-paying days off, diminishing or "freezing" the salary, stimulating free abandonment of the company, earlier retirement, demotion, transfer to another working place, natural drain, discharge/layoff) because dismissals causes big economic, social and general social "shaking" (Bahtijarević-Šiber, 1999, pp. 235–237) that often can not be avoided. Besides exceptional situations where employee has to be fired under certain circumstances (serious contract violation for example), neither growth nor development have the aim or intention of dismissing company employees. This type of employee discharge is known as final disciplinary step (Mathis and Jackson, 2012, p. 221) and does not represent topic of this paper. Business contraction as a long term

or permanent negative change in business (Dvorski and Kovšca, 2011, p. 389) on the other hand, often results in reducing the number of company employees despite the fact that company owners do not want or tend to fire someone. Dismissal process can be treated as non-voluntary separation and should satisfy the criterion of justice, in order to diminish the negative consequences like court accusation or violence toward company (Noe et al., 2006, p. 355). Therefore the whole employee dismissal process should strive to the maximum level of justice. It is a great managerial mistake when trying to convince employers that something is just and correct, when it is not, because in this situation respect and trust may be lost (Templar, 2011, p. 73), with negative impact on working and organizational climate and culture. The important managerial tool in dismissal decision process can be objective method for calculating the rank of employers which should be unwillingly separated from the company according to defined criterions. Discharge of company employees is phenomenon particularly often in times of crisis and official figures have shown that unemployment rate across the eurozone hit a new all-time high of 11,8% in November 2012 (Eurozone unemployment reaches new high, 2013). Current situation with unemployment problem worldwide confirm relevance of this topic.

2 WHOM TO RELEASE?

The dismissal process should also be the part of human resource management politics, so in this process we should differentiate two types of dismissal causes (Marušić, 2006, p. 309):

a) dismissal due to the disciplinary causes (e.g. the employees who do not respect the rules of the company or even worse, who do not react to manager requests, i.e. they destroy working discipline and/or working atmosphere);

b) dismissal due to technological surplus (which imply some employers rights).

This paper deals with the second dismissal causes, because the first group of employees is usually on the top of the manager dismissal list. To answer on the question in unwanted situation where dismissal of the employees is "an unfortunate must", because of technological surplus reasons, certain assumptions have to be realized. This primarily refers to the permanent monitoring of the company employees and their performance. This process consists of observing employees in an ethical and legally permitted way by measuring their performance, conducting interviews, or in other words rating them in general. It is not easy to release someone, especially after long-term successful business relationship or in small rounding where people are usually bond. One thing that is critical for successful managing of labor relations is fairness, but in addition to fairness, a decision to dismiss an employee must also be lawful (Amos et al., 2008, p. 356).

Decision making tool that simplifies any problem similar to this one (certain number of different alternatives where each alternative can be described with more criteria of different level or intensity) is given in Analytic Hierarchy Process – AHP Method. The method was developed by American mathematician Thomas L. Saaty, and the core of the whole process is to make a structure where is possible to determine the importance of the elements – dismissal criteria in this example. Once the main structure is completed, the AHP is surprisingly easy to apply (Saaty and Vargas, 2012, p. 2). In this specific case, management decides which criterion has higher priority over another.

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2.1 Defining criteria

Process of observing employees and rating their performance varies among different companies. Measured categories and measuring techniques both depend on many different factors.

Internal factors:
- type of business
- company size
- organization,
- Management goals etc.

External factors:
- country / region development level
- ethical environment
- competition
- Legal environment etc.

Each company management defines categories that are considered as relevant. The authors present list of relevant criteria based on their own working experience and management knowledge. Criteria determination represents the first step of dismissal process.

Observed and measured criteria:
1. Efficiency (Labeled as **Eff.**)
2. Quality of work (**Q**)
3. Ability to react and adapt to unknown situations (**Unk.**)
4. Team work (**TW**)
5. Loyalty (**L**)
6. Absences (**A**)
7. Improvement potential (**Imp.**)

2.2 Employee shortlist – alternatives and evaluation

Employees that are considered as potential for contract termination are already rated in each category only if company permanently takes care of their evaluation. Evaluation of employee's performance example is shown in Table 1.

Table 1: Example: Shortlist and evaluation of each criterion

Employee	Eff.	Q	Unk.	TW	L	A	Imp.
X Y	0,40	0,60	0,40	0,60	0,20	0,80	0,40
X A	0,40	0,60	0,40	0,60	0,20	0,60	0,40
X B	0,60	0,60	0,40	0,60	0,40	0,60	0,60
X C	0,40	0,80	0,20	0,60	0,80	0,60	0,80
X D	0,60	0,40	0,40	0,80	0,40	0,80	0,20

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Evaluation of every employee based on rating all criteria is described as follows:
Chosen range for evaluation: each criterion rating with 5 levels of evaluation

Eff.:
0,20: satisfying
0,40: average
0,60: efficient
0,80: very efficient
1,00: remarkable

Q:
0,20: low quality
0,40: average
0,60: quality
0,80: high quality
1,00: remarkable

Unk:
0,20: not so good
0,40: average
0,60: good
0,80: very good
1,00: remarkable

TW:
0,20: poorly functioning
0,40: average
0,60: good
0,80: very good
1,00: pure team player

L:
0,20: not very loyal
0,40: average
0,60: loyal
0,80: very loyal
1,00: extremely loyal

A:
0,20: often absent
0,40: average
0,60: rarely
0,80: in some situations
1,00: almost never

Imp.:
0,20: low potential
0,40: average
0,60: has potential
0,80: a lot of potential
1,00: constant improvement shown

Described evaluation in mentioned example gives overall results as shown below ($\sum$):
Employee X Y: 3,4
Employee X A: 3,2
Employee X B: 3,8
Employee X C: 4,2
Employee X D: 3,6

Since managers find different criteria as relevant or more important, the next step is to determine list of priorities with purpose to adjust evaluated criteria to manager's preferences. Therefore overall results gathered above have unsatisfying relevance - since evaluation or rates to be more precise are not weighted yet by manager's priority list. Thus the procedure goes to the next step of criteria significance determination.

2.3   Significance of each dismissal criterion

Management of the company uses objectively gathered rates for each employee, yet to get needed (and final) results must determine relevance of each measured and evaluated criterion. The authors present AHP so this is realized using Saaty's scale (Table 2).

Table 2: Saaty's Scale – definition and explanation of creteria domination (3, 5, 7 etc.) or subordination (reciprocal value: 1/3, 1/5, 1/7 etc.) intensity (Saaty, 2006, p. 3)

Intensity of Importance	Definition	Explanation
1	Equal importance	Two activities contribute equally to the objective
3	Moderate importance	Experience and judgment slightly favor one activity over another
5	Strong importance	Experience and judgment strongly favor one activity over another
7	Very strong importance	One activity is favored very strongly over another, its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation
2 – Weak, 4 – Moderate plus, 6 – Strong plus, 8 – Very, very strong (Intermediate values) Intensities 1.1, 1.2, 1.3 etc. can be used for elements that are very close in importance.		

Example of management preferences and weighting of measured criteria is shown in Table 3.

Table 3: Distribution of weighting criteria importance (pair wise comparison)

	Eff.	Q	Unk.	TW	L	A	Imp.
Eff.	1	1/3	5	4	3	4	5
Q	3	1	6	5	4	5	6
Unk.	1/5	1/6	1	1/3	1/3	1/2	1/2
TW	1/4	1/5	3	1	1/2	2	2
L	1/3	1/4	3	2	1	2	3
A	1/4	1/5	2	½	1/2	1	1/2
Imp.	1/5	1/6	2	½	1/3	2	1

Values above show Saaty's scale usage to compare all criteria to get relevance list, or in other words to get importance of each observed and rated criterion. Fractions are further calculated (1/5 = 0,20 for example) and each value from table above goes in ratio with column sum (Table 4. and Table 5).

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Table 4: Intermediate step to get normalized matrix

1	0,33	5	4	3	4	5
3	1	6	5	4	5	6
0,20	0,17	1	0,33	0,33	0,50	0,50
0,25	0,20	3	1	0,50	2	2
0,33	0,25	3	2	1	2	3
0,25	0,20	2	0,50	0,50	1	0,50
0,20	0,17	2	0,50	0,33	2	1
∑= 5,23	∑= 2,32	∑= 22	∑= 13,33	∑= 9,66	∑= 16,5	∑= 18

As described above, every element is further divided with its column sum.

Table 5: Calculated criteria importance

0,1912	0,1422	0,2273	0,3001	0,3106	0,2424	0,2778	**24%**
0,5736	0,4310	0,2727	0,3751	0,4141	0,0303	0,3333	**39%**
0,0382	0,0732	0,0455	0,0248	0,0342	0,0303	0,0278	**4%**
0,0478	0,0862	0,1364	0,0750	0,0518	0,1212	0,1111	**9%**
0,0631	0,1078	0,1364	0,1500	0,1035	0,1212	0,1667	**12%**
0,0478	0,0862	0,0909	0,0375	0,0518	0,0606	0,0278	**5,5%**
0,0382	0,0732	0,0909	0,0375	0,0342	0,1212	0,0556	**6,5%**

The last column in Table 5. calculates row average, which represents each criterion relevance. Labels (**Eff., Q, Unk. TW, L, A, Imp.**) are excluded from Table 4. and Table 5. due to calculation table simplification. Hypothetical management from this example find working quality and efficiency as two most relevant criteria.

3 EMPLOYEES RANKING AND FINAL CHOICE

Evaluation results from Table 1 are further being multiplied by the criterion weight to get final score. For example, assigned score in Team Work category (0,20; 0,40; 0,60; 0,80 or 1,00) is being multiplied by 9%. The rest of calculation is shown in Table 6. This specific case shows that employee XA achieved worst results in regard to the management requirements. The authors present a simple example that can be easily implemented in any organization. This method will be of special benefit in organization with larger number of employees where many of whom show similar performance.

Table 6: Obtained results and final ranking

Employee	Eff.	Q	Unk.	TW	L	A	Imp.	TOTAL
X Y	0,096	0,234	0,016	0,054	0,024	0,044	0,026	**0,494**
X A	0,096	0,234	0,016	0,054	0,024	0,033	0,026	**0,483**
X B	0,144	0,234	0,016	0,054	0,048	0,033	0,039	**0,568**
X C	0,096	0,312	0,008	0,054	0,096	0,033	0,052	**0,651**
X D	0,144	0,156	0,016	0,072	0,048	0,044	0,013	**0,493**

Making final decision in dismissal process does not necessarily have to be strictly related to the result of AHP method. Although AHP method can be very important managerial tool for making decision regarding employee dismissal, it should not be the only tool/method for dismissal decision. Since dismissal of employees have serious business, economic, but also emotional-psychological and social consequences, in this process beyond management (as owners representatives) professional team from the HRM department and Union representatives can be also involved. Situation where decision or agreement is achieved by the consensus between management, professional team from the HRM department and Union representatives represents good solution.

So by means of the AHP method with the assistance of professional (e.g. criterions of employers potential development and "soft" people characteristics which can not be measured only with figures) and social Union support (who should include different social criterions-e.g. difficult family situation), maximum level of the justice principle in dismissal process can be achieved. When dismissal process is done correctly (by means of AHP method as a main managerial tool in dismissal process) and after discussion plus consensus with professionals from the HRM department and Union representatives, and after detailed and kind explanation to employees who should be separated from the company, the negative dismissal effects can be prevented in a two way sense. Firstly in sense of the company wellbeing in terms of angry employees who have to leave the company against their will (e.g. court accusation, aggression toward management), and in terms of deteriorated working and organizational climate for the employees who are staying in the company. Secondly in sense of the psychological strengthening of dismissed employees, who in the case of just and socially kind dismissal procedure can confront their difficult situation much more easily.

4   CONCLUSION

Dismissal is an organizational procedure for diminishing the employee number. The paper resolves the problem of objectively righteous dismissal of employees in case of technological surplus by means of AHP method. Using AHP method management can objectively choose those employees for dismissal who have shown the worst performance according to the nominated criteria (e.g. efficiency, quality of work, ability to react and adapt to unknown situation, team work, loyalty, absences, improvement potential etc). AHP method represents very good basic tool/method which can facilitate this kind of decision, namely dismissal decisions are never an easy ones.

Since dismissal have serious business, economic, but also emotional-psychological and social consequences, in this process beyond management (as owners representatives) some other things may be included: professional team from the HRM department and Union representatives. Well balanced dismissal solution can be achieved in situation where final decision is result of the consensus between management, professional team from the HRM department and Union representatives.

Namely when dismissal has been done correctly (by means of AHP method as a main managerial tool in dismissal process) and after discussion and consensus with professionals from the HRM department and Union representatives, further after detailed and kind explanation to the employees who should leave the company, all or most negative dismissal effects can be prevented in a two way sense. Firstly in sense of company wellbeing in terms of calming down angry employees who should leave the company although they do not want to (e.g. court accusation, aggression toward management), and in terms of diminishing the

consequences of deteriorated working and organizational climate for the employees who are staying in the company. Secondly in sense of the psychological strengthening of dismissed employees, who in the case of righteous, just and kind dismissal procedure can confront their own unwanted and difficult situation much more easily and with less stress.

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INFORMATION SYSTEM SUPPORT FOR DECISION MAKING IN PUBLIC ADMINISTRATION

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ABSTRACT

Reform of public administration is a process that intertwines political, legal, sociological, economical, informational and other activities that demand everyone involved to use all available means and to implement a variety of activities. The management of information systems in decision making process represents one of the most important challenges. The better information management is an opportunity for innovation introduction in business, it shortens the decision making process and cuts costs. Business surroundings nowadays are faced with a vast quantity of data to be gathered, stored, processed and used in the decision making process and with the limitations in doing so. There is a variety of information systems such as: Decision Support Systems (DSS), Management Information Systems (MIS), Expert System (ES), Transaction Process Systems (TPS), Group Decision Support Systems (GDSS), Executive Support Systems (ESS) and others. Each one has a different role in the hierarchy and decision making process. This paper determines a frame for further research of the usage of Decision Support Systems (DSS) as a support in public administration decision making.

Keywords: Decision support systems, Executive support systems, Expert System, Group decision support systems, Information system, Management information systems, Public administration, Transaction process systems

1 INTRODUCTION

Continuous changes in political, social and industrial aspects pose demands for constant development in working efficiency of public administration which, as a government service, has to monitor the process of these changes.

Changes proposed by the public administrations e-service require changes in legal regulations, implementation of new IT technologies, mastering various resistances both inside and outside of public service organizations as well as the establishment of a new operation model at all levels. Changes in public administration require a change of people's attitudes (both employees and customers), a change in working processes and a change of choice of technology used. The government of each country and the administration in organizations need to change their business processes in order to comply with changes in the public administration. Changes introduced within the public administration have various side effects on all spheres of life. Before introducing these changes, the government must be ready to negotiate with interested parties (users) and be opened to changes and challenges that these

changes imply. Deciding on these changes has to reflect long term solution design. In order to achieve this goal, the changes should be made thoroughly, systematically and implemented methodically. They can only be executed when a critical mass of different factors along with adequate software and other IT support is achieved. Introduction of an information system as a support to a decision-making process in public administration should result in:

- Customer satisfaction with introduced changes,
- Shorter period of various problem solving and decision-making processes,
- Efficient and continuous monitoring of introduced side effects.

Introducing information system as a support to decision-making processes in public administration leads to new challenges because it changes the way IT infrastructure has been used in the past in different departments of public administration. The goal of implementing the changes in public administration is to equalize different processes in variety of public services, determine formal and vocational decision-making levels and to standardize operation procedures to full extent in order to achieve a form in which the user solves his pending request in one step.

Implementation of information system as a support to decision-making process in public administration requires from many services that connect users with the public administration to change their structure and a way of working to be able to follow the changes in legislation and the work of public administration.

Changes will also have to be made in various NGOs that supervise the work of public administration in order to control and efficiently monitor this work.

To improve decision-making process, advanced features of DSS (Decision Support Systems) should be used as they are specific type of information systems focused entirely on data and model integration.

The power of Decision Support Systems lies in their interaction with databases. Results obtained with DSS can be as simple as a table review or as complex as a full system with its own database and mathematical modeling software, statistical analysis, linear programming or various other specialized modeling techniques.

Implementing a decision-making support system would particularly come to the fore in semi-structured and unstructured decision-making on middle and senior decision-making levels.

2   VOLITION AND DECISION SUPPORT SYSTEMS

Definition of decision-making process should be formed considering intertwining relationship between an organization and its environment through optimized use of resources necessary for production or other services, providing work tasks, administrative directives for guiding all employees towards the same objective, inclusion of coordination of human and material resources under objectively defined achievements, establishing effective working environment for the people who work in formally structured groups and through undertaking activities in order to coordinate the work of a group which is not able to achieve the goals of the organization (Baca, 2006).

Decision-making process differs three phases in which certain activities are conducted:

- problem identification, finding various possible solutions and decision making.

Problem identification stage establishes a connection with the system and its environment considering negative and positive influencing factors in relation to appointed objective.

Once the analysis is complete, it is necessary to consider all variants that allow the change of the current situation.

There are two groups of possible solution variants that can be differed in phase two. One group consists of solutions used so far, along with the different variants that depend on the level of influencing factors that are involved in them. The second group consists of variants of new solutions. After creating both groups of different solutions, selection of varieties should be made along with the final decision.

Decision Support Systems can efficiently support the activities carried out in decision-making process as long as certain conditions are met: the objectives must be well defined, the area referred by the objective has to be limited and it is necessary to possess a database. Decision Support Systems are particularly efficient in structured and semi-structured decision-making. In semi-structured and unstructured decision-making process, DSS help decision-maker simulate various solutions dependent on associated factors.

Computerization of public administration along with gaining access to its databases (only those not protected by law) would provide Decision Support System users with broad database. Ever changing environment of public administration, with its constant structural and legislative variations, represents an obstacle for DSS.

Decision support systems could provide better and faster decision-making, particularly in relation to public administration, offering mainly semi-structured and structured decisions dependent mostly on changes in legislation.

2.1 Decision support systems, DSS

Decision support systems are specific type of information systems focused entirely on data integration and behavioral model development in order to improve and accelerate the decision-making process. Strength of these systems is that they are an interactive computer – a database. They can be used for tasks as simple as a table review or as complex as full system integration with its own database and mathematical modeling software, statistical analysis, linear programming or various other specialized modeling techniques. Managing decision support systems represents one of the most elaborate challenges.

With better information management, the opportunity for introducing innovations in business comes, shortening a decision making process and reducing operating costs. Business environments are facing a large amount of limitations and data that is necessary to collect, arrange and use during decision-making process. Public administration is the largest collector of various data used in its work. The possibility of using the data gathered by the public administration and of gaining the access to its databases (those that are not considered public secret) would facilitate the decision making process in different segments of society as well as in public administration itself. Today's business world recognizes different types of decision support systems. These systems are particularly designed and developed to support decision-making at different levels and in different stages of decision making process.
Simon [11] distinguishes two types of decision making:

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- Programmed decisions that are repeated during a period in time and that depend on pre-entered parameters and
- Non-programmed decisions that are unique and usually less structured in IT decision making.

Simon's model of decision making consists of three steps (Figure 1).
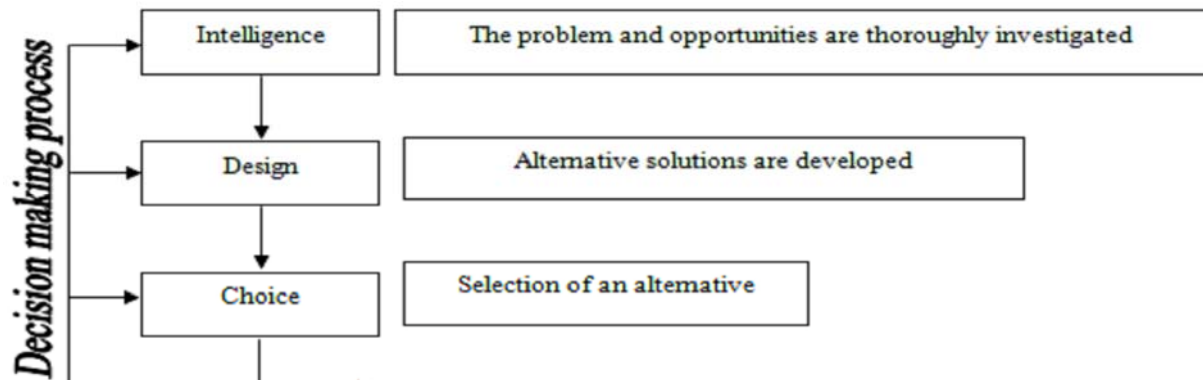
Figure 1: Decision making steps according to Simons model (Simon, 1997)

Unlike the Simons model, Huber (1980) has further refined the decision-making process model, adding two more steps, implementation and monitoring, and thus completed Simon's model (Figure 2).
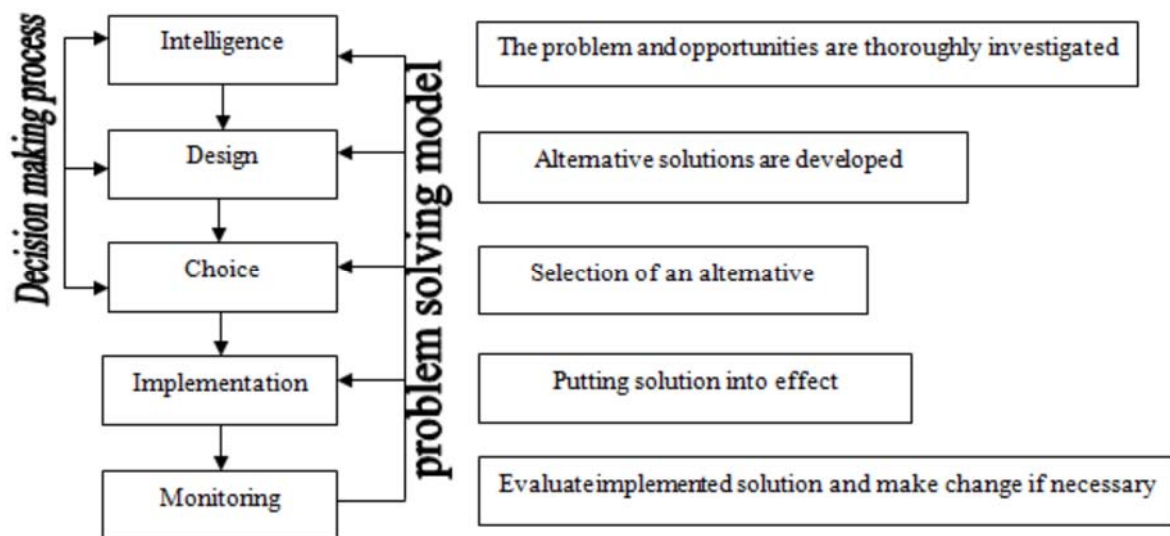
Figure 2: Decision making steps according to Huber's model (Huber, 1980)

Decision support model (DSS) by Raymond [10], consists of four parts:
- **The database** formed based on intrinsic and extrinsic data stored in a database.
- **Program (software)** for generating both scheduled and unscheduled reports. Scheduled reports all have the same structure and are generated by process languages such as Cobol or PL / I. Unscheduled reports are generated in response to user queries created with the fourth-generation programming languages.

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- **Mathematical model** produces information as a result of either a simulation in which one or more organizational physical system components are included or as a result of its own operational processes. Mathematical models can be written in any procedural programming language. Specific languages make this task easier and are more effective.
- **Group decision making** involves multiple decision-makers working in a decision making group. Group members communicate with each other directly or through a group leader.

Report generating program (software) along with the mathematical model is considered to be an essential part of decision-making system.

DSS concept was expanded to support a two or more decision maker team. This way, the idea of special group-oriented programs (software) for group decision making is realized.
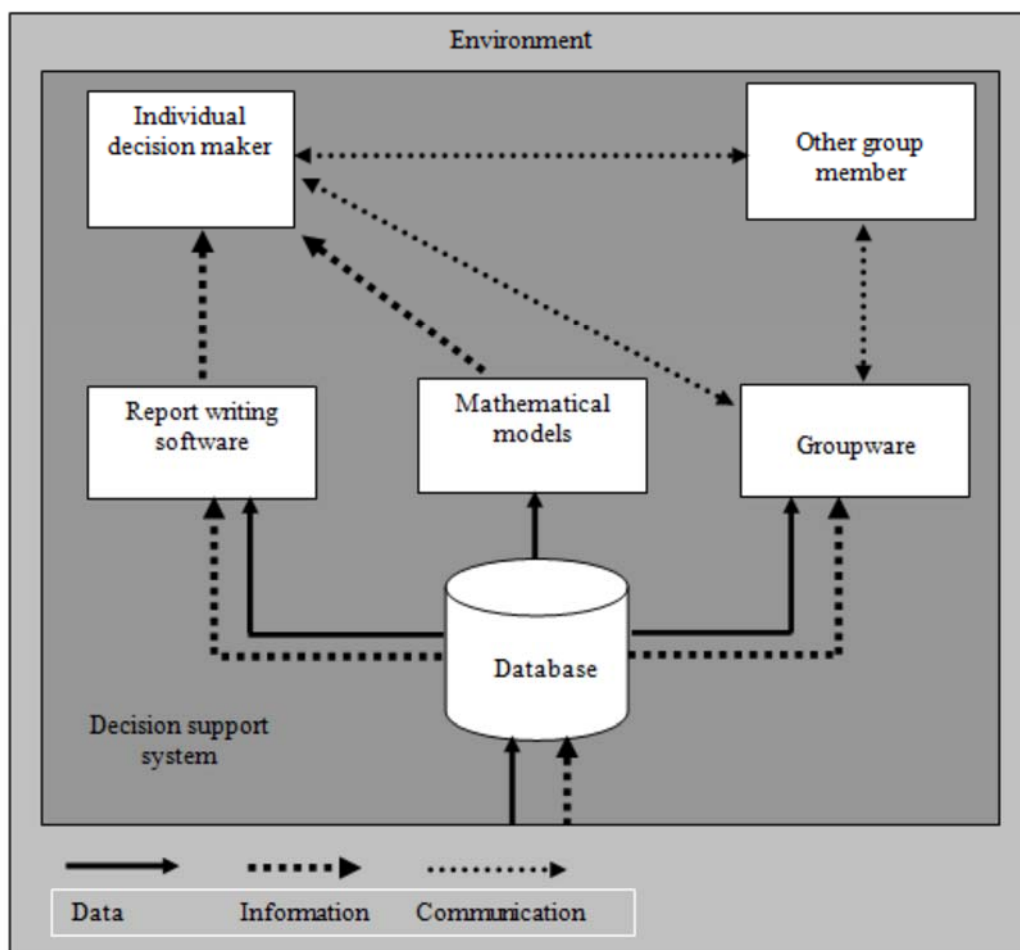
Figure 3: Decision support model according to Raymond (Raymond McLeod, Jr., 1998)

Decision support systems come in a form of scheduled or unscheduled reports that have resulted from a mathematical simulation of entered data. Scheduled reports are routine and repetitive so each organization develops specific forms of their representation. Unscheduled reports are generated according to new information provided within user quarries that may have an impact on the result of a mathematical simulation.

If provided information is structured and repetitive, the usage of decision support systems enables us to reach programmed decision.

Non-programmed decisions are regularly individual decisions related to unstructured and semi-structured problems that use mathematically immeasurable data.

Managers at different levels of the organizational hierarchy need different types of information that can help them make decisions about increasing organizational efficiency. On the lower decision making levels the information should be clear, precise, measurable and related to the organization.

Higher decision making levels require future orientated information that are harder to obtain or to compress, are not fully defined, mostly come from outside of the organization and mainly are not measurable. Only a part of the externally collected information can be measureable, especially referring to sociological factors (availability of labor force), competition, market requirements, price of goods and services, etc.

Different types of data and information are suitable for different decision-making levels and require differently defined information system. Different information systems, if integrated on various levels, can meet the IT needs of current and of a higher decision-making level.

3   ANALISYS OF A DECISION SYSTEM SUPPORT USAGE STUDY

To gain insight in actual usage of DSS among the users, a study has been made in period from September, the first to October, the 25th 2012.

The study was conducted over 26 decision makers and 24 database operators. Examinees were employed in public administration, private organization and some other institutions. The survey was conducted anonymously with the help of a closed type questionnaire with 30 questions. For evaluation purposes, Likert scale of descriptive scores was used, where different levels of consent regarding the claim in question are represented by 5 different categories. The research was conducted through both online surveys and paper questionnaires filled out by 124 participants, out of which only 50 of them or 40% answered all the questions.

76% of examinees declared that the organizations have sufficient technical requirements for implementation of DSS, 20% declared otherwise, while 4% of them remained undecided.

40% of examinees declared that there are sufficient human resources for the implementation of DSS, 44% believe otherwise, while 16% of them remained undecided.

84% of examinees consider information system to be a guide towards efficient decision-making, 4% disagreed, 12% were indecisive.

68% of examinees believe that the information system helps in researching new business organization ways, while 32% could not make the assessment.

28% of examinees regard lack of funds to be an obstacle to the introduction of information system, while 52% remained undecided.

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80% of examinees think integrating their own database with other databases would sufficiently improve decision making quality, while 20% were indecisive.

24% of examinees think that their position could be jeopardize by other people using their database, while 36% believes otherwise.

68% of examinees are convinced that their presently used databases provide sufficient information, while 20% were indecisive.

84% of examinees find introducing DSS and the usage of information systems important in decision-making process, while 12% remained undecided.

20% of examinees feel that they spend too much time searching for information, while 68% feel otherwise.

68% of examinees believe that specific queries should be created for data acquisition in decision-making process, while 24% remained undecided.

66% of examinees favor the usage of their own information centers in decision-making process, while 36% remained undecided.

84% of examinees consider usage of their own database in the decision making process most helpful.

60% of examinees believe that usage of DSS contributes to operating costs reduction, while 40% were indecisive.

60% of examinees find that computerization of public administration contributes to the usage of DSS, while 4% remained indecisive.

72% of examinees think that using available public administration databases helps in the decision making process, while 28% remained indecisive.

36% of examinees see the possibility of graphical data processing provided by DSS as an aid in decision-making process, while 20% remained indecisive.

96% of examinees consider the confidentiality and protection of information indispensable while using DSS.

The differences between different types of DSS were not taken into account in this study. Most available software packages can perform data analysis, modeling, visualization and are versatile enough to adapt to every decision making level. Since advances in technology are significant and present in a variety of organizations, a tendency exist to use more easily accessible information (owned information system and databases) and highly structured data in decision making processes. Contribution of DSS and other information systems for decision making support, based on the answers of examinees, is reflected in decision making process and reduced decision making time. DSS is more frequently used in private organizations (according to 76% of examinees) and at higher decision making levels, which is

evident by the structure of the examinees. All examinees stated that they use some information system as a help in decision making process.

These results should be considered as initial information of a pilot project, while the questions used in the poll need to be supplemented with a group of additional questions to obtain more precise answers on a larger sample group.

This questionnaire does not show if organizations and institutions use integrated DSS or some other ad-hoc tools have been developed that use spreadsheets and databases to create most common reports and analyses.

4   CONCLUSION

Reform of public administration in Republic of Croatia is a process that intertwines political, legal, sociological, economical, informational and other activities that demand everyone involved to use all available means and to implement a variety of activities.

The main political-sociological and economic aspects of the reforms and computerization of public administration in the Republic of Croatia is its inclusion in the EU. Croatia wants to keep running effective social and economic development of the country. To do that it needs to simplify administrative processes and barriers, reduce the number of employees in the public administration and enable the use of modern tools to improve the quality of decision making.

Computerization of public administration is a complex process exposed to many influences from inside of the administration as well as from the external environment. Information is the most important intangible resource in the decision-making process.

The quality and reliability of information directly affects the quality of decision making. Decision-making in public administration has an impact on society as a whole.

Social information systems (including that of a state) have a common goal to enable the participation of as many social subjects in decision-making.

People who make decisions have to be well informed to be able to make quality decisions. The use of modern information technologies and decision support systems helps the quality and speeds up a decision-making process. Input information obtained from databases using structural connections in DSS determine the influence level of factors involved in the process. Simulating changes in the greatness and in influence of individual factors, different variants of the solution in relation to the target can be obtained.

Management information systems and their use in decision-making process is one of the most important challenges in public administration. Better information management provides an opportunity in reducing bureaucracy as well as the cost of administration. Public administration operates in complex environmental conditions that include frequent changes of legal framework and the evaluation of public policies as well as internal constraints related to data management. How to cope with the increasing amount of data to be collected, stored, used and modified in accordance with changes in the legal framework?

For management of changes, this work elaborates the possibility of using ontological approach that can improve the consistency and timeliness of inputting changes in the largest data bases. For quality decision-making, the use of the DSS has been proposed.

Conducted research shows that all examinees use some information systems in their decision-making process. The majority of examinees is familiar with the benefits provided by these systems although they use them only partially still favoring the usage of their own databases.

This research should be continued by supplementing questionnaires with a new set of questions that would show how much are these systems used in problem detecting and solution obtaining purposes and how much just for making repetitive decisions in accordance with the changes occurred in the environment.

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FINANCIAL INSTABILITY OF ENTERPRISE AS THE MAIN OBSTACLE HAMPERING DEVELOPMENT IN TURBULENT ENVIRONMENT

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ABSTRACT
This research is related to simulating the leading indicator of financial instability of an enterprise – with a view of issuing an early warning as to about possible forthcoming changes in the enterprise's activities. This index has been acknowledged as the leading one with respect to the enterprise, since is it can reflect the future financial capacity, based on the initial data already available. The financial stability concept implies diagnostics of an enterprise's activities on a long-term horizon. The first group of financial stability indices operates with discreet findings; the second group of financial stability indices is capable of reflecting continuous random variables. The diagnostics process consists of two stages – the analysis of the past activity of enterprise and the simulation of its future activities. At the second stage, experts encounter the fundamental problem of forecast inaccuracy and unpredictability of results for years ahead. The goal of this research is to supplement the enterprise financial stability concept and to simplify the tasks of simulating the future activity - by working out and using the leading indicator. The object of research is the activity of three conspicuous Latvian enterprises operating in three well-known sectors of economy. The subject of research is financial stability of enterprise, characterized by harmonic functioning of the activity and the process. The main problem to be solved to attain the goal is the validation of the future financial instability index as a leading indicator and the proof of its efficiency. In process of research, monographic method, comparative analysis method, and method of induction as well as some other mathematical and econometric approaches were used. The results obtained are of practical nature, since they allow one to simplify the procedure of enterprise finance stabilization under a turbulent environment by using the possibility of obtaining important information describing future shocks.

Keywords: Activity, Financial stability, Leading indicator, Process

1 INTRODUCTION

The concept of financial stability implies diagnosis of enterprise activity in the long term. The basis of the concept is division of analysis tools into two groups. The first group of financial sustainability indices operates with discrete results, while the second group consisting of financial stability factors is capable of reflecting continuous quantities.

The diagnostics process consists of two stages: analysis of the past and simulation of the future activities of the company. At the second stage, experts normally face a fundamental problem of inaccuracy and unpredictability of forecasting results for many years to come. This problem can be solved by simulating alternative scenarios that could change depending on future changes in the internal and the external environment of the company. The need to adjust the scenarios should be determined by the value of an integrated indicator, which can alert the managerial staff of the company in advance as to potential threats of upsetting stability condition.

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The purpose of this study is to complement the concept of financial stability of a company and to simplify the tasks of simulating the future activities through the development and use of the leading indicator.

The target of research is the activity of some well-known Latvian enterprises operating in three different sectors of economy. The scope of research is financial stability of the company characterized by the harmonious functioning of the activity and the process. To hit the target, the main thing is to test the future financial instability index as the leading indicator and to prove its efficiency. This task is solved by using official data received from some well-known enterprises. The research period has lasted 10 years – from 2001 to 2010.

In the course of research, the following techniques were used: monographic method, method of comparative analysis, method of induction and other mathematical and econometric techniques.

The findings are useful since they allow one to simplify the process of stabilizing the company finance in turbulent environment through the possibility of the timely receipt of important information concerning future perturbations.

2 TURBULENT ENVIRONMENT AND ITS INFLUENCE ON ENTERPRISE FINANCE

The modern stage of development of economy is associated with a lot of factors. After the global economic recession swept the world in 2008, a certain solution was continuously sought for under the grave situation that had occurred. All of the approaches and methodologies suggested within the last five years are subdivided into two groups – political and economical ones.

Advocates of the approach of the first group consider necessary some continuous changes of external environment to bring about economic and social alignment, i.e., convergence. This approach seeks to find an optimal balance of all elements of the system by virtue of the State's efforts to ensure prosperity in the long run. However, it happens frequently that such declared goals are not achieved. This may be due to the system elements' inability to maintain balance for a long period of time. Even as a result of manipulations with external environment, a short-term balance only is achieved; continuous changes of all factors of the system take place in the course of economic development, which leads to the necessity of reviewing "the optimal vector". As a result of permanent correction of those factors under a continuously changing turbulent environment, experts eventually cease to understand each other. The essence of this problematic situation is external environment's inability to control the system. Therefore, the existence of this approach is impossible if isolated from the concepts of the second approach.

The second approach focuses on analysis of the system from the inside - through study of the principles of functioning of the system structures and the interaction between its elements, thus giving one an opportunity to receive information on economic potential and the extent of its use.

The economic potential is formed through the interaction of such subjects of economic system as enterprises, lending institutions, insurance and financial companies and households. In this article, the first subject of the system – an enterprise - is regarded as the key subject. This

choice is accounted for by the degree of freedom of using the financial potential of the subject in question. Since the activity of lending institutions, financial and insurance companies is strictly regulated by State and international legal and legislative acts, the company was offered a greater flexibility of its finances. As regards households, they can not enjoy such a high freedom since they possess a far inferior financial potential.

Thus, the internal element of economic system operating under turbulent environment, which possesses the highest manoeuvrability, is a company. Therefore, optimization of activity of this particular subject is capable of raising the economic potential of the State.

According to the theory of financial stability developed by V. Kovalev (2002), I. Blank (2004, 2005), R. Kaplan and R. Norton (2007), L. Gilyarovskaya (2006) and E. Altman (1993, 2002) the current potential of a company is determined through calculation of its financial potential. This is accomplished by the current activity financial ratios determination method based on using the company's financial data reporting. However, such an analysis reflecting discrete past performance is inadequate for the development of the enterprise under a turbulent environment.

For the company development in the long term, the author examines the concept of financial stability as harmonious interaction of activities and processes within a specific system's framework. A set of methods of this approach allows the enterprise to successfully build and use its financial capacity for a long period of time, through the transition from financial sustainability to financial stability.

3   FINANCIAL POTENTIAL OF ENTERPRISE FROM THE PERSPECTIVE OF TIME

In order to obtain objective knowledge about the company's activities, the managerial staff use various data generated by various divisions and departments of the company. As a rule, in order to determine a current state of performance, all the tasks are reduced to evaluation and comparison of the past and the current potential of activities. Practice shows that experts' opinions differ because different methodologies involve an analysis of various, and often multifaceted components of financial capacity. When a calculus tool is focusing on efficiency, while another one – on productivity and the third one is focusing on variability, no homogeneous result can be obtained. As regards interpretation of such a distorted result, conclusions and recommendations are distorted even to a greater extent, as a rule. Ultimately, the company management not only fails to receive necessary information in support of decision making, but is being mislead since there is no more way to check exactly which specific component of financial potential was analyzed by expert.

Within the framework of the research performed by the author, a financial model of enterprise should be presented as a system of interaction of activities and processes. The model in question enables one to make parallel investigations of the activities run by the company under the influence of many different processes. At this point, one can identify the stability of the activity itself, not excluding the essence of the impact rendered by processes. If the activity is stable, there is no point of subjecting it to the impact from processes. But, if the activity is unstable, it is necessary to identify the extent of the impact rendered by processes, which would enable one to find and determine compensatory mechanisms capable of stabilizing the activity (Olve, Roy and Wetter, 1999; Scott, 2000; Teslinov, 2011; Van Horrne and Vachowicz, Jr., 2001).

Stabilization of activity is reflected in the financial potential of enterprise over time. Therefore, a model is required that could trace the financial potential of enterprise in the long run. Such a model cannot be developed on a one-sided concept of financial position or financial sustainability; as a must, the model should include the trends of changing the key parameters of activity with respect to future periods.

Thus, the financial potential of enterprise should be assessed from the perspective of time, – in the short and long term, respectively. As regards the financial stability approach the methodology of which enables one to analyze continuous performance results, the theory of financial sustainability analyzes only moment quantities of financial condition at the given moment. Consequently, the methodology of ratio analysis of financial sustainability determines discrete variables from the perspective of time, whereas the methodology of financial stability enables one to identify trends based on the analysis of continuous variables.

Table 1: Financial potential analysis methodology time-orientated comparison

Financial potential from the perspective of time	Short-term prospects	Long-tern prospects	Pattern of result	Recommended approach
Assessment of past activities	Very efficient	Efficient	Continuous	Stability
Assessment of current activities	Efficient	Inefficient	Discrete	Sustainability
Assessment of future activities	Inefficient	Very efficient	Continuous	Stability

Discreteness and continuity of findings obtained by these approaches is a core principle of the analysis where identifying and forecast of continuous data come to the fore. Discrete data in this task enables one to set some known standards for the basic criteria of stability of activities, the control of which enables one not only to state an accomplished fact but to perform a discrete valuation of a model scenario of the activity development in future, where usage of data in advance is a compulsory requirement.

4 ANALYSIS OF DISCRETE DATA IN ASSESSING FINANCIAL SUSTAINABILITY

Financial sustainability of an enterprise is a definite set of criteria the values of which lie within some definite preset ranges. From the standpoint of research performed by V. Kovalev (2002) and L. Gilyarovskaya (2006) financial sustainability of any profit-making company is its solvency, i.e., the availability of a mortgage debenture with respect to the company's assets. The investigation performed by Kaplan and R. Norton (2007) has expanded this object domain to system presentation. The authors have come to the conclusion that provided this principle is observed within the framework of the preset system, it would seem inexpedient to consider each criterion individually or to try to unite all possible sustainability criteria into a single set.

Taking into account the statement mentioned above, a single individual value of a criterion can not fully describe an activity, while any attempts to unify all of the known sustainability criteria of the enterprise into a single set lead to heterogeneity of results with respect to the samples that also often contradict to each other.

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While interpreting these results reflecting a definite period of time, experts face with the problem of discreteness of extracted values. Since financial sustainability criteria are based on such a form of financial reporting as accounting balance sheet and the annexes enclosed thereto, one must reckon with the fact that the economic sense of the received result is discrete, i.e. it reflects the situation as of the current moment - the end of the financial year.

The problem solution in terms of division of the study timeframe is to present the financial potential of companies in two time prospects – short-term and long-term ones. The use of criteria in this case, from the perspective of time, is pre-conditioned by two different approaches and toolsets.

Within the framework of the author's study, financial sustainability of the company is assessed according to a respective rating developed. The main components of sustainability are liquidity and solvency. By graphically combining the two components, "sustainability quadrants" are formed, whereon the obtained values, characterizing the standard-meeting level with respect to received indices, are marked. Thus, rating A, B or C is formed with respect to each component, depending on the indicator scale received.

Financial sustainability is formed by 9 main coefficients generalized in the Table below:

Table 2: Financial potential discrete data analysis instruments

No	Name	Designation	Indicator most affected	Parameters used when calculating indicator	Recommended value
1	Current assets of company's own	*Wcap*	Solvency	*CL, CA (Inv, AR, C)*	*Wcap>CL*
2	Current liquidity ratio	*Kcl*	Liquidity	*Inv, AR, C, CL*	*≥2*
3	Liquidity turnover ratio	*Kfl*	Liquidity	*AR, C, CL*	*≥1*
4	Absolute liquidity ratio	*Kal*	Liquidity	*C, CL*	*0,5 – 1,0*
5	Current assets coverage ratio	*Kwc*	Solvency	*Wcap, CA, (Inv, AR, C)*	*≥0,1*
6	Working capital share in stock cover	*Ws*	Solvency	*Inv, Wcap, (Inv, AR, C)*	*≥0,5*
7	Stock cover ratio	*Wjsc*	Solvency	*Wcap, JSC (Inv, AR, C, BL, CR)*	*No recommendations*
8	Current assets to equity ratio	*Me*	Solvency	*E, Wcap (Inv, AR, C)*	*No recommendations*
9	Maneuver capability of company's own circulating assets	*Mwc*	Solvency	*C, Wcap (Inv, AR, C)*	*0,0 – 1,0*

where: *CL –current liabilities*;
    CA – cash reserves (current assets): CA = Inv + AR + C;
    Inv – stock;
    AR –accounts receivable;
    C- cash resources,
    JSC – logically substantiated stock cover sources;
    JSC = Wcap + BL + CR.

BL – bank stock loans,
CR – accounts payable for raw materials,
E – shareholders' equity.

Financial sustainability substantiated by the discreteness of essence of results, shows the state of the company under investigation in the short term. The values in question are useful for financial analysts both analyzing the past and the current activities and assessing the sustainability of future development scenarios. However, one should bear in mind the fact that these values characterize the time-related control points of future scenarios rather than tendencies which are continuous in essence.

5   ANALYSIS OF CONTINUOUS DATA IN ASSESSING FINANCIAL STABILITY

Continuous data obtained in process of analyzing trends, are quite fit for assessing financial potential in the long run. Such data is capable of reflecting the potential-changing dynamics both with respect to a period of the last activities and when simulating the future activities. The main purpose of the analysis of continuous data within the framework of the author's study is to identify and formalize financial stability criteria.

The methodology of research of continuous data and analyzing the company's finance in the long run is revealed in the works by R. Higgins, T. Copeland, T. Coller, J. Moorin, A. Dolgoff, and I. Ivashkovskaya (Fonseka and Tian, 2011; Copeland, Koller and Murrin, 2008; Copeland and Dolgoff, 2006; Ivashkovskaya, 2012). Within the framework of a system-based presentation, from the perspective of the long run, the development of integrated indicators is coming to replace the system of financial ratios.

The enterprise growth theory proposed by R. Higgins (Fonseka and Tian, 2011) in the 80-ies of the 20th century, originally anticipated calculation of planned sales growth in a subsequent period based on current data. At present, the sustainable growth pace also requires formation of a balance between all many-sided objectives of a company. The parameters of this equation include, for example, the planned capitalization of profits and the level of dividends, the planned level of turnover and capital coefficient of assets, the planned leverage of company-owned and borrowed funds, and some other purposes. These goals are difficult to be agreed among themselves, since, according to Pareto principle, achieving one of the goals, to a certain extent, prevents one from achieving another. Ultimately, the goals may be balanced in such a way that the result is absolutely stable and equal to zero. It is exactly in this situation that financial sustainability is achieved. But as soon as the growth rate becomes positive as a result of interaction of the parameters, this suggests possible development of activities in future by way of using the current financial potential.

If the available potential is sufficiently used, a number of changes concerning criteria supporting the increase of business value take place in the company. In the opinion of T. Copeland, T. Koller and J. Murrin (2008) who had generalized the theory of cost estimate of a company for the first time, the discounted cost index of a free cash flow is an integrated indicator of company's activities. This index includes all the business activities - from the smallest incoming payments to the largest outgoing ones; the included business activity is corrected with due consideration for depreciation deductions and changes in current assets. Therefore, within a number of years a general wave of positive and negative financial flows is formed. This value, depending on the purposes of analysis, may be given, i.e. discounted,

with respect to weighted average capital cost at any given time. At this point, discreteness of the value and continuity of trends come into contact.

In the studies performed by I. Ivashkovskaya (2012), a number of cost dynamics-tracking models have been developed, that demonstrate this figure as the most objective and successful indicator of activities. Consequently, the financial stability of the enterprise implies the use of the existing financial potential in the long term in order to create value. The author considering growth rapidity indicators as predictor of possibilities, and considering value as a result of realizing them, forms "sustainability quadrants", whereon the obtained values, showing the standard-meeting level with respect to received indices, are marked. Thus, rating A, B, or C is formed with respect to each component - depending on the indicator scale received. The main indicators of growth rapidity change and creation of value are generalized in the Table as follows:

Table 3: Financial potential continious data analysis instruments

No.	Name	Designation	Indicator most affected	Parameters used when calculating indicator	Recommended value
1	Sustainable growth ratio	SGR	Growth rapidity changes	Pr, P_n, S, E, D, A	$SGR > 0$
2	Sustainable growth ratio under changing conditions	SGR_g	Growth rapidity changes	$E, div, S/A, D/E, P_n/S, b, S_0$	$SGRg > 0$
3	Future cash flow	FV_t	Cost	$P_n, Dept, A, NI, ROIC, g$	$FV_t > 0$
4	Current cash flow	PV_t	Cost	$FV_t, d, P_n, A, NI, ROIC, g$	$PV_t > 0$
5	Total present value integrated	PV	Value	$C_0, N, PV_t, FV_t, d, P_n, Dept, A, NI, ROIC, g$	$PV > 0$
6	Weighted average capital cost	$WACC$	Value	$w_S, R_c, w_D, d_D, t_s, R_f, R_m, \beta$	$WACC < g$
7	Further present value at the end of forecast period	PV_{term_N+1}	Value	$FV_{term\_N+1}, N, FV_{N+1}, WACC, g, P_n, Dept, A, NI, ROIC, w_S, R_c, w_D, d_D, t_s, R_f, R_m, \beta$	$ROIC>WACC$ $ROIC>g$
8	Enterprise value	$PV_{project}$	Value	$PV, N, PV_{term\_N+1}, FV_t, FV_{N+1}, WACC, g, P_n, Dept, A, NI, ROIC, w_S, R_c, w_D, d_D, t_s, R_f, R_m, \beta$	$ROIC>WACC$ $ROIC>g$
9	Further value in an indefinite term	$PV_{term|g=const}$	Value	$NOPLAT, ROI_g, g, WACC, w_S, R_c, w_D, d_D, t_s, R_f, R_m, \beta$	$PV_{term|g=const} > PV_{term\_N+1}$

wherein:

P_r – *increase in retained profit;*
P_n – *net profit;*
S –*target sales volume;*
E –*ownership capital as of the beginning of the current period;*
D –*borrowed capital as of the beginning of the current period;*
A – *Company's assets;*
S_0 – *sales volume within the current period;*

Dept – depreciation;
NI –investment rate;
T_{DO} – period of time preceding the pay-back period;
N – prediction period;
NOPLAT –net operating profit after deduction of adjusted taxes;
ROI_g – incremental profitability of new investment capital;
w_S – ownership capital share within the general capital structure;
R_c –earning power (profitability) expected by shareholders;;
w_D – gearing (borrowed capital share within the general capital structure);
d_D –lending interest rate;
t_s –profit tax rate;
R_f –risk-free rate;
R_m – expected return of the market;
β –systematic risk ratio;
ROIC –Return on Invested Capital;
g – expected growth rate for an indefinite term.

The financial stability determined by the continuity of the essence of results shows the state of the investigated company in the long term. The values in question are useful for financial experts both when analyzing the past activities, where they prove their efficiency, and in process of assessing alternative development scenarios in future.

6   SIMULATION OF LEADING INDICATOR OF FINANCIAL INSTABILITY

In process of simulation and assessment of alternative scenarios of development under a turbulent environment, one must bear in mind that stability-creating mechanisms are efficient provided the corresponding pre-requisites exist. In this connection, the main obstacle to the company development under a turbulent environment is financial instability of the company's financial potential.

In other words, working out a future development scenario implies formalization of those instability processes that are most likely to occur. Moreover, the possibility of occurrence of those formalized processes unbalancing the activities should be identified prior to the advent of those processes. To make an early warning of the managerial staff, the task in question shall be solved by way of simulation and proof of the leading indicator efficiency.

Within the framework of the author's study, the indicator in question is expressed as financial instability index and reflects the future unbalance between different integers of the company. In process of simulation of the indicator, the principles of advance, polarity, irreducibility, commensurability, and adequacy have been applied (Chernavsky, 2011, 2012; Kopitov, Faingloz and Chernavsky, 2012).

The index is based on current activities, is an integrated indicator of disruption of stability and growth in the future period; after some transformations, it is expressed by the following formula:

$$FFI = w_1 \frac{A_0}{S_0} + w_2 \frac{D}{A_0} + w_3 \frac{Exp}{S_0} + w_4 \frac{CL}{CA}, \tag{1}$$

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wherein:

FFI (Future Financial Instability) – future financial instability index;

A_0/S_0 – current ratio of capital intensity;

D/A_0 – scheduled combined insolvency ratio;

Exp/S_0 – scheduled loss ratio;

CL/CA – scheduled coefficient of net capital intensity;

w – weight or percentage of overall index parameters.

Recommended values: *FFI < 0,8; A_0/S_0 < 1; D/A_0 < 1; Exp/S_0 < 1; CL/CA <1.*

By assessing unbalance between the objectives and the destruction extent of the current financial potential, the indicator in question can show the planned degree of financial instability for the subsequent period. The indicator saturation principle is unidirectional one; it is preset within the limits of 20% according to Pareto law as well; consequently, approximation to a preset limit means launching the most powerful destructive forces destroying financial potential. Thus, the most essential function of the indicator is to notify about an imminent possibility of the advent of the above-mentioned phenomenon. Since predicting the advent of a definite phenomenon reflects the essence of the trends typical to those phenomena, the indicator in question is a reflection of development trends characterizing the company's financial potential.
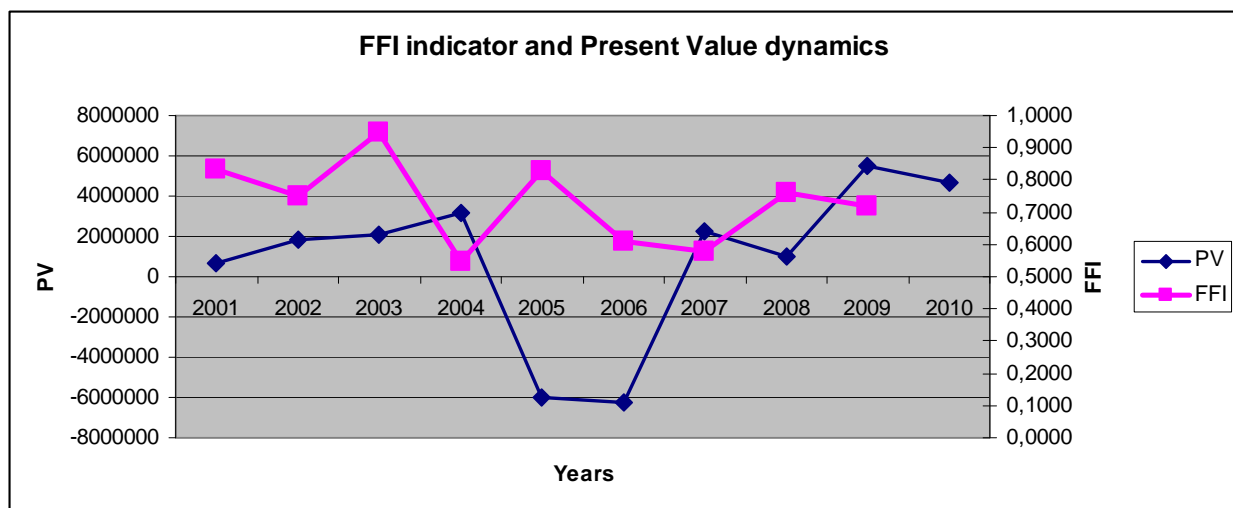
Chart 1: FFI Indicator and present value dynamics comparison

Since value is an integral reflection of activities, this diagram shows the dynamics of discounted value of a well-known Latvian pharmaceutical company, as well as the dynamics of the leading indicator of financial instability (http://www.lursoft.lv). Despite the obtained financial sustainability index «AA», the graph shows that the company underwent a strong decline in value during the period from 2004 to 2006; however, within the period from 2004 to 2006 the company was able to pull out its free cash flows to the former and even a higher level. In the first above-mentioned case, a leading indicator of financial instability came out in a critical area in early 2004, which attested to the forthcoming problems already at that time. In the second case, i.e. during the recession period of 2005 – 2006 when the value was negative, the indicator came out of the critical area. This fact also testified that financial stability criteria had been defined correctly, and the financial potential available to the company had been used in full already a year before the upswing.

By considering the parameters of the indicator as summarized in the Table 4, one can come to the conclusion that some erroneous steps directly causing loss in value had been taken in the past; moreover, a conclusion can be made concerning the actions that were compensatory mechanisms in the solution of this problem.

Table 4: Sensitivity analysis on FFI index parameters

Parameters of FFI indicator	Early 2004	Early 2005	Early 2006	Early 2007
CL/CA	**1,073991076**	-0,237371014	0,654742972	0,189598617
A_0/S_0	0,84280475	**1,131708556**	**1,143288293**	**1,02325683**
D/A_0	0,784922927	0,268207797	0,455452641	0,19989205
Exp/S_0	**1,097760494**	**1,021562697**	**1,051896073**	**1,022917329**
FFI	**0,9499**	0,5460	**0,8263**	0,6089

On analyzing the equation (formula 1) parameters with respect to key periods characterized by the highest variability, one can draw a conclusion on the main problem that had been solved by the company successfully. The loss of free cash flow at the company was caused by a parameter which was the most sensitive one for the company – the planned net capital intensity. The problem is connected with a mistake in working capital management and non-observation of the rule of financing of long-term investments. In early 2004, the company has created a situation where long-term investments were financed by short-term loans, which lead to a sharp loss of free cash flow.

However, on having managed to solve that problem by early 2005, the company faced the challenge of total capital intensity, which attested to the fact that the assets acquired were too large with respect to the planned sales. Throughout the whole period of investigation, no problems with the leverage of equity and borrowed funds were observed; however, the planned sales volume was short to cover the current expenses, although the company had been working profitably.

The efficiency of the leading indicator has been tested in process of analyzing the activities of 18 well-known Latvian companies from 3 different sectors of economy; developing a multi-factor regression model implies that all the four parameters are meaningful. In the course of checking observation of the model adequacy principles, it was found that correlation between dependent and independent variables is missing; furthermore, no autocorrelation, multicollinearity, and heteroscedasticity of remnants were stated. In this connection, the model adequacy was acknowledged, and it is possible to use the model in problems of financial diagnostic of the company.

In the process of ensuring financial stability, the indicator was recognized as a leading one, as it may show future continuous efficient value-cost when using current data of financial statements.

7 CONCLUSION
The accomplished study complemented the concept of financial stability of the company and simplified the task of simulation the future activities through the development and use of the leading indicator of financial instability.

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The use of the indicator in question enables the managerial staff of the company to receive early warnings as to about violations and unbalance in the company's activities some time in advance - prior to their occurrence. The necessity of using the indicator is motivated by a possibility of identifying some implicit threats to financial potential through the analysis of four main parameters of equation. The effect rendered by each individual parameter implies a definite degree of destruction of the financial potential stability. The findings received through the analysis of empirical material prove that the financial instability indicator is capable of detecting threats of instability even under the circumstances where the financial potential is acknowledged admissible in terms of sustainability and stability. This is primarily due to the essence of leading values. This example clearly shows that the company has violated the principle of financing long-term investments as early as in 2004, and has subsequently corrected this problem by early 2006. Accordingly, data on the value of business is showing a sharp decline in 2005 and the subsequent stabilization by the end of 2007. It should be noted that the situation in terms of stability and growth rate changes of the company was good enough during the whole period of the study.

This result is not a contradiction but rather a supplement to the concepts of financial sustainability and financial stability, as in this study using a systems approach the assessment was conducted from the perspective of two-level separation of financial potential. The assessment of financial potential was presented from the perspective of activity and processes and from the perspective of time – both in the long and the short term.

Compliance with this principle is the main recommendation to simplify the procedure of stabilization of the company's finance in a turbulent environment, through the possibility of a timely receipt of important information about future perturbations, which should be used in the simulation of financial potential in the long run.

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PERCEPTION OF THE IMPORTANCE OF THE STRATEGIC PLANNING FOR THE EMPLOYEES MOTIVATION

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ABSTRACT
Strategic planning is a very important business activity. It is an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. In order to determine the direction of the organization, it is necessary to understand its current position and the possible avenues through which it can pursue a particular course of action. For an organization's vision and mission to be effective, they must become assimilated into the organization's culture. They should also be assessed internally and externally. The internal assessment should focus on how members inside the organization interpret their mission statement. The external assessment — which includes all of the businesses stakeholders — is valuable since it offers a different perspective. These discrepancies between these two assessments can provide insight into their effectiveness. It seemed very interesting to explore the involvement of employees in the process of strategic planning in retail chains in Croatia and the impact of the level of involvement to their motivation. The aim was to investigate the extent to which employees at different hierarchical levels are involved in the strategic planning process. The results showed that the top management is mostly involved, as expected, that has a negative influence on employee motivation. It is also shown that the impact on employee motivation in retail chains is positive only if management realizes the importance of participation of employees at all levels in the process of defining and creating strategic planning.

Keywords: Croatia, Employees, Motivation, Retail chains, Strategic planning

1 INTRODUCTION

Strategic planning concerns the firm's objectives and acts as a vehicle through which top management can plan for the future. It also includes the identification of mission and goals, the implementation process towards the achievement of identified goals and objectives and finally, finding solutions or correction actions in strategy evaluation and control process (Hitt, et al., 2000; Pearce and Robinson, 2000).

The largest part of definitions includes strategic formulation which identifies the mission and goals, how the implementation takes place and evaluation at the end of the stage of strategic planning process. The definition of strategic planning used in this thesis comprises a process where a firm establishes its objectives, formulates actions designed to achieve objectives, implements the actions and assesses the progress and results. As this definition implies, strategic planning process focuses on the setting of firm objectives and development and implementation of plans designed to achieve them.

In order to determine the direction of the organization, it is necessary to understand its current position and the possible avenues through which it can pursue a particular course of action. For an organization's vision and mission to be effective, they must become assimilated into the organization's culture. They should also be assessed internally and externally. The internal assessment should focus on how members inside the organization interpret their mission

statement. The external assessment — which includes all of the businesses stakeholders — is valuable since it offers a different perspective. These discrepancies between these two assessments can provide insight into their effectiveness. It seemed very interesting to explore the involvement of employees in the process of strategic planning in retail chains in Croatia and the impact of the level of involvement to their motivation. The aim was to investigate the extent to which employees at different hierarchical levels are involved in the strategic planning process. First, the strategic planning will be defined through all process, then the benefits of successful planning will be explained, after that the results and discussion will be given and finally the conclusion.

2 DEFINING STRATEGIC PLANNING PROCESS

Strategic planning process increases the way a firm manages the internal resources, scanning the external environment, position themselves in an industry. This is because small and medium firms are easily affected by the changes of the industry (Covin and Slevin, 1989; Storey, 1994; O'Regan and Ghoabadian, 2006). Strategic planning process in the study is divided into three elements namely efforts in strategic planning, degree of involvement in strategic planning and formality. Strategic planning process include efforts made by managers and a number of essential dimensions for rational decision making including goals, environmental positioning and matching firm's capabilities with opportunities (Kramarczuk, 1987; Stanwick and Pleshko, 1995). The efforts in strategic planning process are shown in Figure 1. The efforts consist of strategy formulation stage; implementation stage, evaluation and control stage are identified in firms' execution of strategic planning.
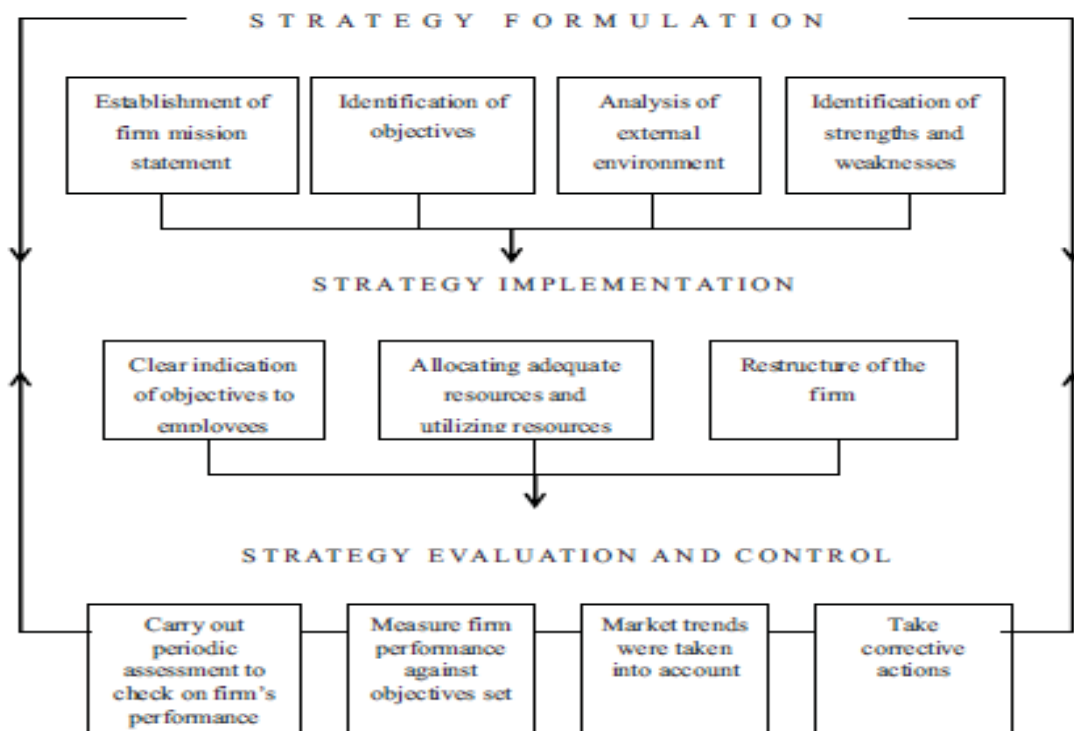

Figure 1: Efforts in strategic planning process

The strategic planning process addresses a long-term goal and requires the involvement of top management in policy making, reviewing the objectives, goals, allocation of resources, identifying alternative strategies, scanning for environment and evaluation to the whole

process. Degree of involvement suggests how strongly a person is interested in the firm. Thus, for any given firm, a person can conceivably be strongly attracted, indifferent, or strongly repelled in terms of the range of involvement (Wooldridge and Floyd, 1990). Many authors have highlighted the important role of top management involvement in the strategic planning process (Foo and Grinyer, 1995; Elbanna, 2003; Wooldrigde and Floyd, 1990; Fiegener, 2005; Ketokivi and Castaner, 2004). Although not all research has supported the positive impact of top management involvement in strategic planning (Dyson and Foster, 1982), strong theoretical support suggests that broad involvement by top management in the strategic planning process enhances the organizational outcomes. For instance, Westphal and Frederickson (2001) found that top management has a significant impact on strategic planning. Moreover, some researchers support that top management involvement in strategic planning even though many strong theoretical suggest that broad base involvement by top management in the strategic planning enhances the firm performance (Hrebiniak and Joyce, 1984; Higgins, 1981; Van de Ven, 1980). Similarly, Freeman (1989) reports that top management involvement in strategic planning clearly influence effective planning consequences. Besides, the involvement also enhances psychological planning consequences such as morale, commitment to the firm, commitment to planning and motivation.

According to Pugh et al. (1968), formalization is the degree to which the norms of the organization are explicitly defined. He further distinguished between "formalization", referring to whether these norms are written down in manuals and other documents. Formality in strategic planning requires an explicit process (Armstrong, 1982; Mintzberg and Lampel, 1999). The reason of having strategic planning written in detail is to ensure strategic planning process receives commitment from those who are affected by it and to allow an explicit evaluation and clearly specify objectives is part of the formal strategic planning (Armstrong, 1982).

3   BASICS OF EFFECTIVE STRATEGIC PLANNING

The benefits of a successful planning process are too important to leave unfulfilled and the benefits include: goals and objectives; decision aid which entails a guide for making really tough decisions in difficult situations, such as which programs to cut, where to invest energy, where to invest capital, or how to adjust to a rapidly changing environment; change management that represents a framework for managing organizational change and building creativity; management board (a springboard for recharging and reforming the board); and finally an inspiration that acts as a tool for generating organization motivation und excitement.

There are three organizational qualities required for excellent strategic planning: the objectivity to accurately assess the organization's strengths and weaknesses, the ability and creativity to envision the future, and the discipline to work through the plan with enough detail to provide a road map for staff and board members.

Many organizations do not invest enough thought into the preplanning process. Good data should drive the planning process, and it may take a bit of time to gather it. Creativity and intuition are also needed, but a solid base of information is needed. Also, the participants in the planning process are critical. This involves key staff and their diversity in skills. Moreover, an off-site meeting space is excellent for changing the mindset of participants. Timing is everything, so rimes of crisis or times during which key staff members are too busy has to be avoided.

When the proper groundwork has been laid, the planning process can be straightforward. The need for efficient use of time and the need for adequate discussion and resolution have to be balanced. A review of the mission and vision statements is necessary as a starting point. Maintaining a valid mission and vision for the organization are the reason for planning in the first place. Avoid compromise for the sake of compromise; it often leads to mediocrity, not excellence. The discussion of strengths, weaknesses, opportunities, and threats should cover internal as well as external factors. Every strategic plan has goals and objectives, and the good ones have measurable and specific objectives. The plan must be tied to timeframes. Otherwise, the more difficult items will be put off until it's time to do another strategic plan.

What concerns the evaluation of the process, frequent reviews will mark progress, so the areas of concern have to be identified, as well as necessary changes to the plan. A strategic plan is like a budget in that which constantly needs tweaking as organizational environment changes. Management board and staff members should be thinking strategically all the time, because the plan represents a framework for their thinking.

4 THE IMPORTANCE OF THE STRATEGIC PLANNING FOR THE EMPLOYEES MOTIVATION

There are many different ways to define motivation, but in the narrowest sense motivation can be explained as the process of encouraging people to achieve both, the companies and personal goals. These goals are intertwined and often the realization each goal individually, indirectly means the realization of other (Bogdanovic, 2003). Motivation, aims to: improve productivity, efficiency and creativity at work, improve the quality of working life in the organization, strengthen the competitiveness and success of the company etc. (Bahtijarevic-Siber, 1999).

Motivational strategies can be classified into material and pecuniary motivation strategies (Buble, 2010). Material motivation strategies can also be divided into direct (wage system) and indirect pecuniary motivations (benefits). Pecuniary compensations with a role to motivate employees are of an increasing importance same as the awareness on the need to introduce them. At the same time companies are taking care of the continuous carrier development of their employees. They generally have a greater effect with highly educated employees.

When talking about the importance of motivation for firm performance, we talk about skills and competencies of employees, but not only that, motivation has its direct and indirect impacts, and thus significantly affects the performance of tasks, improving employees work performance, productivity and efficiency.

Just as the system of motivation is based on different forms of rewarding and stimulating successful employees for their outstanding work, they must be a worked out system of penalize employees who do not do their work conscientiously and responsibly. A penalizing system, as long as an employee gets an explanation on why he or she is being punished, can sometimes have a positive effect on the worker.

Corporate vision can be one of the motivators in a company. Corporate vision is the main motivator and instigator of the entire company and it is very important that is integrated into the company's business. People, who should carry on the vision of the company to its employees, are company managers. The best example is a charismatic leader who in practice

often begins this process by clearly articulating a vision that promises success, and then sets high expectations and expresses the belief that people can accomplish them.

5   RESULTS AND DISCUSSION

The research was conducted among employees of two retail chains by using a questionnaire, in order to determine the difference of motivating employees in domestic and foreign firms and also to investigate the extent to which employees at different hierarchical levels are involved in creating the vision, mission, goals and strategies of the company in which they currently operate. Sample consisted of 50 employees.

The familiarity of employees in the existence of the vision of sample in the first company is 84%, while in the second case, it is only 37%. Likewise, the question of whether employees are considered as an important part of the vision of the firm, the first sample shows 78% affirmative answers, while in the latter firm only 20% gave an affirmative answer. When asked whether the vision of the company motivates them, employees of the first company responded positively with 62%, and employees of the second responded with 36%. The questionnaire has shown that employees in the first chain are mostly motivated by money rewards and bonuses (66%) slightly less through praise by superiors and gift packs, and at least through the vision (7%). The situation is similar in the other retail chain; greatest motivators are money and financial incentives (87%), supervisors praise from 11% and 2% of the gift packs. Also, the survey results show that as much as 81% of employees in the first retail chain to be sufficiently motivated to work, while in the second chain for the same question only 59% of employees answered confirmatively.

Previous research has shown that workers of the first company have a much greater incentive to work, which is closely linked to their information on the vision and mission of the company, which is being implemented across all branches and levels of management. In this way, workers are informed on company's vision and are thus considered an important part of it, which in psychological terms becomes an immaterial motivator to work. While the other company is seen with insufficient employees awareness of the vision, mission and objectives of the company and do not have nearly no opinion about that. There could be found a group of disinterested workers, which may be a consequence of that, which can eventually affect the financial results.

From all results shown, it can be concluded that the impact of vision on the motivation of employees in the companies is positive, but only if the management of the company recognizes this as a good way to motivate with an intangible method, and if it is used periodically toward all employees in order to create mutual concern in completing of work tasks. Vision can have a very powerful impact on employees in a positive way if through vision they feel as a very important link in achieving profit and a qualitative and quantitative progress of the company.

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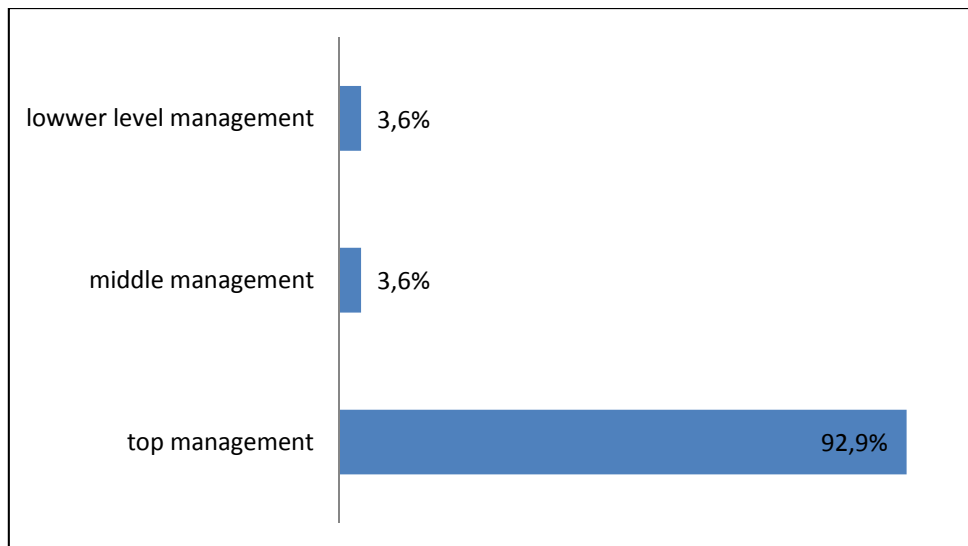
Chart 1: Current position of respondents in the sample

Chart 1 show the current position of the respondents in the enterprise in which they operate. It has shown that 2.9% of respondents perform a top management position, while 14.3% of respondents are in positions of middle management, and the highest percentage, 82.9%, are lower level management.

The majority of respondents feel that they have enough knowledge of the vision, mission, goals and strategy (51.4%) and that it takes certain knowledge in order to create the appropriate mission and vision (85.7%). Their companies have clearly defined and documented visions, missions, goals and strategies (80.8%), and in creation of strategy most participates are top managers (92.9%), while 3.6% of them responded that it is also done by middle managers, and lower level management which can be seen from chart 2.
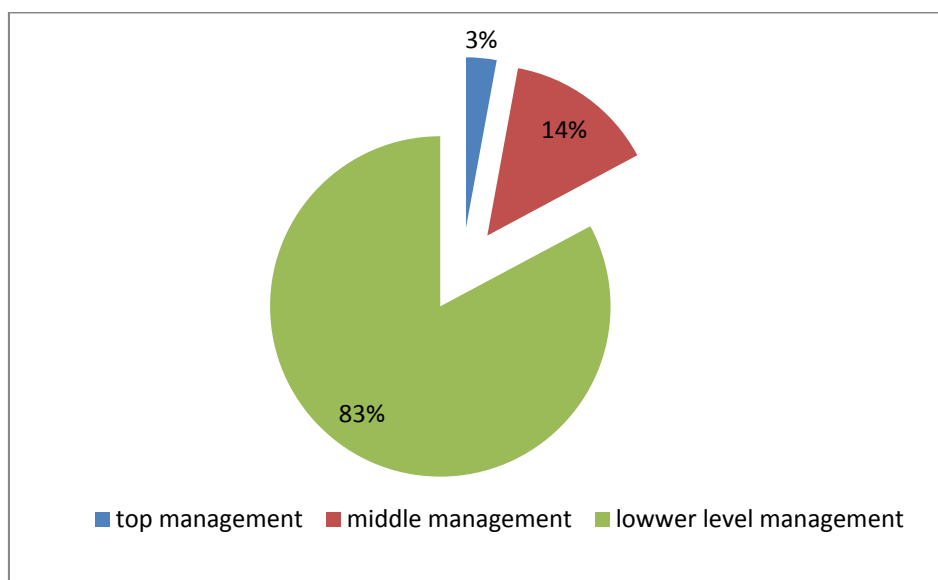
Chart 2: Participants in the process of creating a vision, mission and goals of the companies from sample

Furthermore, the results show that respondents did not participate in the process of creating a vision, mission, goals and strategy (89.3%) and they view this process as partially an important part (53.6%). According to the respondents the top management has partially devoted enough time developing a vision and mission (46.2%) and has partially tried hard enough to bring them to other employees (51.9%). This vision and mission are partially challenging and motivating (57.7%), they are clear to every employee (42.3%), and related to the system of values (48%). According to most respondents success of the company depends on the vision and mission (48%) and on the observance on the company vision and mission (68%).

6   CONCLUSION

A strategic plan is like a budget and it constantly needs tweaking as your organizational environment changes. Frequent reviews will mark progress, identify areas of concern, and highlight necessary changes to the plan. Management board and staff members should be thinking strategically all the time; the plan is a framework for their thinking. There are two distinct dynamics in the planning process, including the content of the plan itself and the emotional climate. Both must be managed to obtain ongoing success.

The aim of this paper was to investigate the extent to which employees at different hierarchical levels are involved in the strategic planning process and what influence that has on employee motivation. The results showed that the top management is mostly involved, as expected, and that has a negative influence on employee motivation. It is also shown that the impact on employee motivation in retail chains is positive only if management realizes the importance of participation of employees at all levels in the process of defining and creating strategic planning.

Every employee, regardless of which position he works in a company, should participate in the process of defining and creating a mission and vision. This will contribute to a greater employee motivation and increase their desire to work and remain in the company as they will be under the impression that his opinion is valued and affirmed.

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STRATEGIC ANALYSIS OF CROATIAN COSMETICS INDUSTRY

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ABSTRACT
Firms have to develop their strategies based on market and competition analysis. Key premise of shaping firm strategy is industry analysis. Michael Porters' five competitive forces model of industry analysis provides an insight into the effect that forces like supplier power, buyer power, threat of substitution, barriers to entry, and internal rivalry have on competitive intensity and profitability of cosmetic industry in Croatia. The profit potential of the industry is defined by the interaction of all competitive forces. Porter's five competitive forces model highlights how each of the five forces is not equally important, but it should be noted that it can help the firm to better understand the environment in which it operates, as well as its advantages and disadvantages, that enables the firm to affect its long-term profitability. Based on the strategic analysis it can be concluded that the key factor of success in Croatia, but also in Europe, including the global cosmetics industry, lies precisely in the power of having strong recognizable and established brands, which also affects the loyalty of customers. This fact is confirmed by the results of an empirical study that showed that the most important factor that contributed to the success at the cosmetic market is existence of strong and recognizable brand. The analysis showed that the cosmetic market in Croatia is attended by the numerous competitors, but with the presence of a few dominant industrial participants, which shows how competitors are not nearly equal in size and power. The research results showed that the profit potential of cosmetic industry in Croatia, as well as its prospects for the next five years, is not showing so great profit. Although there is the expected growth in the following years, which will certainly be moderate and slow.

Keywords: Cosmetic industry, Industry analysis, Industry profitability, Strategy

1 INTRODUCTION

Nowadays firms do business in a very insecure environment, and they are everyday faced with sudden, unexpected and unpredicted changes in the environment. Markets are becoming more demanding, complex, and new industries and industrial branches are constantly appearing. Competitiveness is becoming a key issue: how to be better than other firms. That question is exactly the foundation of not just success, but also survival at the market. Firms must be flexible, innovative and must improve their management on a daily basis, lead by a business strategy so they can achieve better position than their competitors, because that is what differentiates successful firms from unsuccesfull ones. The goal of this research is to determine which elements are crucial for long term survival of firms in the cosmetics industry, to analyze and grade the competitive ability of the Croatian cosmetical industry, as to determine certain structural changes. The goal of this research is also to carry out a strategic analysis of the Croatian cosmetics industry using Porters' model of five competitive forces, and to analyze strategic groups and firms.

Analysis of an industry provides us a structural analysis and a display of an individual industry, it's participants and basic characteristics (Fleisher and Bensoussane, 2003). The main purpose is the attractiveness ratings of individual industries, respectively the foresight of the average level of long term profitability of a firm in industry, which is measured by the rate

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of return on invest capital (ROI). The basics of industrial analysis are based on the assumption how profitability of an industry is not random, nor is it totally dependant of special influences inside the same industry, but it is at least one part under industrial structure. The four key elements of industrial structure that affects profitability, but also competitiveness of an industry are: incoming and outcoming barriers, information, difference in implementation and industry concentration (Goett, 1999). Request for strategic analysis comes from the statement that a manager cannot effect the outside environment in a short term period but can adapt and in the light of change, perceive the set vision, mission, goals and strategies, and also determine the movement direction in the future period. Therefore analysis ensures conceptual framework for elaboration of strategic options, which will be based on ration approach, intuition and experience (Buble et. al., 2005).

The basic settings of the S-C-P paradigm include the search for position inside the industry, whether it's regarding an existing, respectively the one in which the firm competes or it's regarding potential industries (Porter, 1980). That would enable a better postion compared to competitive forces, as well as achievement of an above average profit. Structural approach observes long term profitability as a basic characteristic of competitiveness of a firm. The essence of this approach is that a firm achieves its competitive advantage depending on the condition which is offered from the external, outside environment of the company, and that the plain industrial structure determines the performance of the company (Spanos and Lionkas, 2001).

The idea how the success of a company is actually a question of its inner capability, and not the position in industry, is based on the resource based view, which was very popular in the 80's and 90's (Rumelt, 1984). The better the resources , the larger the chance of chosing the enhanced strategy due to the fact that long term profitability, which all companies tend to achieve, comes from having superior resources which enable significantly lower cost or a sustainable differentiation advantage (Wernerfelt, 1984). Competitive advantage must eradiate from a possession of unique resources, skills, knowledge and technology that competitive firms cannot have at all, or cannot easily endorse or imitate. Non material resources are considered a very important source of competitive advantage because of its intangibility which makes them hard to transfer to other groups or contexts (Szulansky, 1996).

According to the resource principle strategy in order to achieve competitive advantage, companies need to have unique resources according to four criteria: creation of added value, rarity, impossibility to imitate, and capability to use (Barney, 1991). After analizing internal and external factors it is necessary to estimate the capability of a compay through comparing its key success factor with its key competitiveness indicators. The most influential of structural analysis was developed and elaborated by Michael E. Porter who states that the being of forming strategy comes from the capability of a firm to carry itself along with competition, and that the threat of competition in industry is not just from direct competitors but also from all economic elements of the industry (Goett, 1999).

In his model Porter (1980) identified five crucial factors that affect the level of concentration and profitability of an individual industry. Industrial business environment, its components, its real and possible interrelations that effect long term profitability of a company is defined through the firms' position in industry by: **1. Strenght of industrial rivalry**- rivalry appears when some of the competitors are not satisfied with their position (or feels endangered or has notices a possibility of improvement of his market position. The level of rivalry among

existing companies depends on these factors: exit barriers, number and size of competitors, fixed costs, growth rate of industry, differentiation of products, recognizable brands, tranfer costs, diversity of competitors and strategic importance which interact with one another. Industrial rivalry will be intensive when there are a large number of competitors that are equally strong and large and when there is slow industrial growth rate, or when there is a decline in demand for products. **2. Suppliers bargaing power**- it is necessary to define it through relations with commodity suppliers, material equipment suppliers, but also with the supplier from the financial sector (firstly the banking sector) which supplies companies with capital. Bargaining power of the supplier goes toward lowering profitability of an industry, and increasing profitability of themselves through increasing the price of their own products or lowering the quality of their products while keeping the same price (Porter, 1987). Every company has to improve its strategic position by finding those suppliers and buyers which have less bargaining power (Tipurić, 1996). **3. Bargaining power of buyers**- buyers compete within the industry through requests for lower prices, getting a higher quality product at the same price, through request for receiving extra services or in fact throught turning competitors toward a mutual battle which as a consequence has lowering profitability of the same industry (Porter, 2004). Bargaining power of buyers defines the position of a monitored industry in distribution channels. **4. Threat of substitute products** - Significant success in the battle against substitutes and in the favor of own products, can be yielded only by mutual activity of the whole industry, of all of its participants. **5. Threat of new entrants**- potential industry entrants refer to companies that could be interested in entry with the same or similar asortiman as the company within the industry.The size of the advantage that existing firms have over newcomers is measured by the size of barriers to entry, and that determines the measure in which an industry can enjoy long term profits outside the competitive level. Barriers to entry present the force that deters new companies from entry into a certain industry that seems attractive; it protects competitors, and in way shrinks dangers from fragmentation of the same industry.

2   CHARACTERISTICS OF THE COSMETICS INDUSTRY IN CROATIA

The cosmetics industry is one of the most competitive markets on which the world biggest companies are fighting for domination. Until the 1990's people in general considered that cosmetical products are intended toward the adult female population, however today's reality and the picture of the market are totally different (Kumar et. al., 2006). Companies that manufacture cosmetical products are mostly directed toward younger females, but also males, so in other word a widespread population of consumers, with which this market gains much more importance. It was high productivity, competitivenes and constant growth in the last couple of decades that created the strength of this industry and ensured foundation for a solid future. But of course, there are some weaknesses which can be seen through the fact that the cosmetical industry, even though very secure and attractive, is not totally resistant to the widely present recession and on the fall of the purchasing power of the customers which find the sometimes very high prices of cosmetical products ''too big to swallow''. Cosmetics companies and producers find a big chance in focusing on specific market niches and certain chosen clients so they can effectively follow the battle with big industrial leaders that already take a large part of the market and are too strong to compete due to their tradition, product quality and safety.

Nevertheless, even though the constant growth in the last few decades, there still exists a threat of stagnation and saturation of the market where numerous industrial leaders present a great threat to the profits and future of smaller competetitors. The number of cosmetical

companies is growing day after day and with that as well their rivalry on the market, while the strength of industrial rivalry is very important for the industry profitability. A mutual competition of companies is present to achieve a better technological and market position. With the companies of the local industry, it is important to include the companies that cover the import segment (international competitors and importers) which are also rivals in the battle for market share. According to the degree of industrial concentration the cosmetics industry represents consolidate industry in which there is a domination of larger companies, even though there are also a large number of small and medium companies, but they do not have the power of forming industrial events. The main characteristic of this industrial structure is expressed by the interdependence of the companies, which is manifested in a way that actions of one firm affect the profitability and market share of other firms.

The world most famous producers can be found on the Croatian market, and even though Croatia for them presents a very small market, they are all fighting for prestige and profit. Large companies dictate the trends; invest large funds into research and development and also in the promotion of their products. It is very hard to deal with this competition. New values are constantly entroduced; production is getting more efficient with an increased environmental protection and safety of the consumers themselves. Products of the highest quality of the world biggest companies are available to Croatian consumers and the product quality they carry. There is a need for a lot of effort, knowledge and funds in advancement and development of new products and technology due to various inovations and progress to be followed and the Croatian products the parry with import competition.

The main characteristic of the cosmetics production in Croatia is the exceptional dependance on the import of commodities, along with the already mentioned presence of the largest European and global producers. It is a fact that import of cosmetical products is growing even though the domestically produced products are of good quality; it is actually the rise in consumption that is generated by imports. The quality of products of larger and smaller producers is on a very high level which testifies its establishement on the local and neighboring markets where certain products have become somewhat of a brand. The operations are complicated due to the liberalization of markets, and with the recent accession of Croatia to the European Union, the liberalization process will further strengthen. There is a risk of increased competition, and thus greater market competition.

The cosmetics industry market marks the phenomenon that is called the experience economy, a phenomenon by which means consumers are no longer so interested to try the product, as much as they are in trying a new experience, which helps to create a memory of a particular moment or activity. The general economic crisis has left its trace on the cosmetics industry, but according to research made by Mintel the so called "Lipstic index"[1] proved to be a pretty good measure of the recession. This study, has predicted that some categories of the cosmetics industry will even see an increase in sales due to the recession. Of course, this increase in sales cannot be assumed for the whole cosmetics industry, but only for certain segments. The reason for that probably lies in human psychology that is not an element with a negligible impact on the purchasing habits and decisions of every consumer, there is even a deep emotional link.

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[1] "Lipstic index" of the research indicates the use of cosmetic products during the recession. Type of economic indicators coined by Leonard Lauder, chairman of the Estee Lauder. The greater is the crisis in the country, women buy more lipstick.

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For the production of perfumes and cosmetics in Croatia in 2010, 52 companies were registered, with total revenue of 229 million, and 323 people employed. The largest Croatian companies that produce toale-cosmetical products are Saponia, Neva, and Biokozmetika Annyer. The manufacturing of cosmetics is also done by a successful series of small, often family-oriented companies primarily in the natural cosmetics area (olive oil, essential oils, plant extracts, bee products), which is also a trend in the field of cosmetics. The demand for products on the Croatian market, has been growing, year after year, therefore a continuing increase in imports is not surprising. The support of this shows the data by which the total exports of toale-cosmetical products in Croatia in 2010 amounted 5 727 tonnes, in 2011 5 792 t, and meanwhile the import was significally larger, around 27 552 tonnes in 2010 and 25 237 t in 2011.
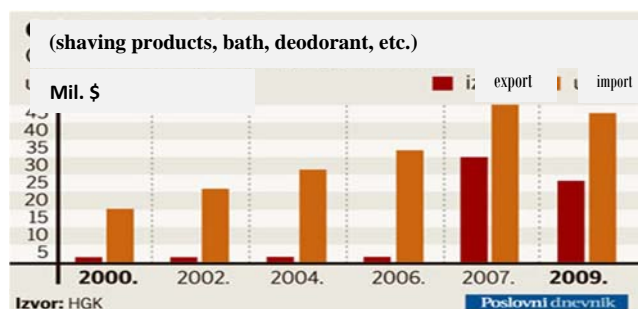
Chart 1: Import – export relation

The consumption of cosmetics in Croatia in addition to increased domestic production and increasing imports is still very modest, compared with the developed countries of Europe. Almost the entire world's major companies that produce cosmetics are represented in our market: Henkel, P & G, Unilever, Beiersdorf, L'Oreal, Beecham, Colgate, Benckiser, Revlon and many others. The most imported products are skin care and makeup products, shampoos, hair care products and perfumes (only the import of perfmus in 2009. reached the value of $ 25 million). The problem is that Croatia does not produce perfumes and cosmetics, and therefore these products are only imported. Domestic producers compete significantly with imported products only with toothpastes (Saponia, Neva), which occupy about 35% of the market. The promotion of Croatian products has had an important role and so has the Croatian Chamber of Commerce with their projects like "Croatian Quality" and "Originialy Croatian".

For small businesses the Golden Kuna prize for innovation has been very stimulating and so the 2005. prize was awarded to Milla, a Zagreb based company specialized in producing natural cosmetics and organic detergents. The Croatian level of knowledge stands alongside to the European and Croatian legislation is in full compliance with European regulations. With this an important role is given to the Croatian Society of Cosmetic Chemists (HDKK) established in 1992. by the initiative of professionals and scientists in the fields of research, development and production of cosmetics. HDKK has around a hundred members, mostly experts in the filed of comestics, dermatologists and pharmacists, and its main activity is to promote science and cosmetics as well as promotion of education and extension of knowledge related to the production and operation of cosmetic products.

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3 RESULTS OF STRATEGIC ANALYSIS OF THE CROATIAN COSMETICS INDUSTRY

Given the subject of research and the breadth of topics, the methodological approach was based on desk research and the collection and processing of relevant secondary data (books, magazines, studies, Internet, annual reports of companies, data CCE's). In order to meet performance goals, and thus the quality of processing threads have been conducted along with additional primary research, such as the questionnaire (quantitative research), and in-depth interviews with manager from the industry (qualitative research). Based on the strategic analysis we can conclude that the key success factor in Croatia, but also in Europe, including the global cosmetics industry, lies precisely in the power of owning recognizable, strong and established brands, which also affects the very loyal customers. Confirmed by the results of an empirical study in which a majority of respondents that were familiar with the Croatian cosmetics industry, recognized that having a strong and recognizable brand is a factor that largely contributed to the success of the cosmetics market. The next success factor of the Croatian cosmetics industry is an effective development of new products that enable companies to increase the sales, and thus higher profits. Consumers are looking for new sensations, new specialized products, and are therefore investing in market research, which is subsequently processed in detail, the best investment in innovation, and thus the development of new products. Investments prior to the occurrence of a product or an entire line, often are much more profitable than investments in in pure promotion of a product that already exists in the market.
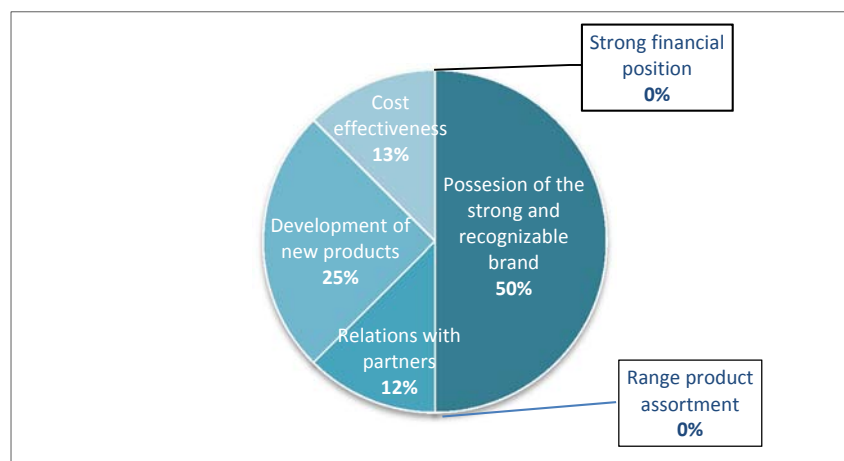
Chart 2: Key success factors on the Croatian cosmetics market

Cost-effectiveness, as well as partnerships with wholesalers also contributes to the success on the Croatian cosmetics market. However, it should be noted that a key deciding factor of success may change over time, and it is a particularly interesting condition referring to the mature phase of the life cycle with stagnant industrial growth, which the Croatian cosmetics industrie also faces. It is exactly cost effectiveness that will in times of stagnation become a key factor that will determine the ability of a company to survive and prosper.

3.1 The strenght of industrial rivalry

The analysis has shown that there are several companies at cosmetics market in Croatia, but with the presence of a few dominant industrial participants, that shows how all the competitors are nearly equal in size and power. Respondents have stated this as the most important competitive force, the force that contributes most to reducing the attractiveness of

the industry itself, and thus lowering profitability. Competitive moves of one firm have significant effects on other firms in the industry. Methods of promotion, commercial activities, discounts and specialization of products are often conditioned just by competing with each other, and only those companies that follow the trends can count on maintaining their market position. Sometimes it's surprising how fast certain products are being copied by rivals. Foreign companies, whose share sales are growing, most certainly have an important role on the Croatian cosmetics market. Therefore, the results showed that intensity of rivalry in cosmetics industry in Croatia is high.

3.2 Threat of new entrants

According to the respondents of this research the cosmetics industry in Croatia and its prospects over the next five years was graded mediocre, without great profit. But it is still satisfactory compared to other activities in Croatia, and thus represents a potential magnet for new competitors. However, the total number of firms in the industry is high, and the leading position in the industry is held by a few dominant companies, and is therefore very difficult for a newcomer to enter the industry. According to the estimates made by the cosmetics industry participants, the entry of new competitors would be accompanied by high costs and high investment in marketing in order to win loyalty of consumers. A confirmation of high customer loyalty is evident in the relatively stable market share of present company, which implies the need for high investment in marketing by the new competitor to win the customers. Companies that are already renowned in the industry and are known by users, automatically receive a greater deal of confidence. The effects of publicity are generally cumulative, and therefore must promote more newcomers than existing industrial enterprises in order to try to achieve the same sale, and to create a general awareness of their existence in the market. Respondents stated that the easiest option of entering the market is through importing finished products, which is now also present. Brand recognition is of crucial importance together with the compliance of quality and the price, plays the biggest role in selecting a particular cosmetic manufacturer. Govermental policy and regulation do not harden the entry of new competitors, in other words the government does not have a big role in the protection of existing companies, although there are various governmental regulations and requirements in order to fit a particular cosmetical product according to standards, so it would be safe for humans and their health. Because of that the product distribution of a new competitor could be a major problem because of the strong relationship with his distributors. In other words, for companies in cosmetics industry threat of new entrants is low.

3.3 Threat of substitute products

While some claim that for cosmetical products there exists a large number of substitutes, others argue that substitutes do not exist. So according to one side, subsitutes do not exist because each product is in some way original, with an exception of copies of branded perfumes or similar products that are trying to copy. As possible substitutes to so called skin care category products, could be certain supplements with similar effects cosmetics, skin however they just for themselves are not sufficient, so there is virtually no replacement. On the other hand, other respondents claim that substitutes consist of all the strong competition, private label products and consumer products. Private label products as a substitute for a product of a well-known brand, but not a cosmetical product as such, they are another version. The results showed that there are virtually no substitutes, which means that replacement products are not available on the market. Products that meet the needs of this industry cannot be easily satisfied by other products; however there is an important role of complementary products.

3.4 Bargaining power of buyers

By analysis of the questionnaire on the negotiating power of buyers the following figure was obtained. Companies in the industry distribute most of their products to a smaller number of customers; most of the manufacturers distribute their products through wholesalers and retailers who make a link between the producer and the final consumer of cosmetical products. Customers are very powerful, and they create a negative pressure on the business of cosmetical companies that seek to fully adjust to the needs of their consumers. From the customers point of view the loss of one manufacturer is not a big loss, and therefore companies in this industrys must follow market trends, especially among its customers. Customers are becoming more and ''pickie'' and will not choose a particular cosmetic product if it does not suit their lifestyle, they demand more specialised products, but also the simpler natural ones. The launching of brands in more categories and their increasing presence in the consumption of Croatian citizens has lead to the formation of some price sensitive consumers. This increases the bargaining power of buyers who are driven by price, and thus forces the manufacturers of certain branded products at a to lower prices on special ocasions , which has a long-term negative effect since it is still the price that plays a key role. Since it is unrealistic to expect that consumer spending power will increase to a greater extent, it is clear that each share won in favor of the trademark, is also a long-term loss for the branded products. However, branding is very intense on the cosmetics market and it is very hard to find a customer and distract him from his brand. If the buyer believes that the benefits of his brand are superior to the rest, he will be willing to sacrifice the possible savings that he might gain when chosing a cheaper product. When we view wholesaler as the main purchasers of industrial products, the following applies: a high degree of concentration of buyers, buyers are well informed about the demand for the products, buyers can significantly influence the purchasing decisions of end customers, powerful customers using their position seek and succeed to get better terms from the manufacturer. In other words, buyers have high bargaining power.

3.5 Bargaining power of suppliers

In the cosmetics industries both key and smaller suppliers have important role. Key suppliers are the ones that are relevant to the core business of the company, and with them the company develops long-term partnership, on the basis of the contract. There is a large impact on the quality of inputs on the final quality of cosmetic products, and is therefore necessary to require a certain certificate on their quality. The highest bargaining power suppliers have in the case when an enterprise does not depend on one supplier or a small number of suppliers. Bargaining power of suppliers is gained by their size, but also by the importance of the company's business. The number of suppliers of the cosmetics industry is limited and most competitors use the same, it is almost impossible and unprofitable to store inputs for longer period, which in fact increases the bargaining power of suppliers. Suppliers in the industry have a dominant position when negotiating the price, so when changing the suppliers companies incur additional costs that are related to the testing of inputs, modification of the manufacturing process, etc. The fact that products of different suppliers really fluctuate in price, but also in quality, and it is impossible to use cheaper raw material without affecting the quality of the final product, this characterizes as a force with high bargaining power. But also, the respondents stated that the cosmetical companies are important customers to their suppliers and that they can not easily raise their prices or threaten by lowering the quality of their products. Therefore, we can conclude that the bargaining power of suppliers was graded with a mean.

4   CONCLUSION

Based on the strategic analysis it can be concluded that the key factor to success in Croatia, but also in Europe, including the global cosmetics industry, lies precisely in the power of owning recognizable, strong and established brands, which also affects the very loyal customers. This is confirmed by the results of an empirical study in which a majority of respondents familiar with the Croatian and cosmetic industries having a strong and recognizable brand recognized as a factor that largely contributed to the success of the cosmetic market. The attractiveness of the Croatian cosmetic industry can be considered mediocre, while the intensity of the rivalry and the bargaining power of customers contribute the most to the profitability of the industry, it has not been seriously jeopardized by other forces like: the threat of substitute products, the entry of new firms into the industry, as well as the bargaining power of suppliers. According to the estimates by the respondents' intensity of rivalry among existing competitors it is established as dominant force that affects the profitability of the cosmetics industry in Croatia. The analysis has shown that there are several companies present in the market, but with a few dominant industrial participants, which shows how competitors are not nearly equal in size and power.

According to the estimates made by the cosmetics industry participants, entry of new competitors would be accompanied by high costs and high investments in marketing in order to win loyalty of consumers. Therefore, the threat of new entrants into the industry was rated low because it is quite difficult for entrants to come alive in the minds of consumers. Companies in the industry distribute most of their products to a small number of customers through wholesalers and retailers who make a link between the producer and the consumer of cosmetical products. Customers are very powerful, and perform a negative pressure on the business of cosmetical companies that seek to fully adjust to the needs of their consumers. However, the profit potential of the cosmetic industry in Croatia, as well as its prospects for the next five years were rated as mediocre, without greater profits. Although growth is expected in the years to come, it will most surely be moderate and slow, and the recent Croatian accession to the European Union will not bring great and positive changes.

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AN EMPIRICAL STUDY ON COMMERCIAL VEHICLE DRIVERS' TRAINING: PERCEPTIONS OF SMALL AND MEDIUM LOGISTICS FIRMS IN MALAYSIA[1]

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ABSTRACT
The main objective of the study is to identify the factors that influence the need for driver's training among the small and medium logistics firms. In addition the study aimed to determine the relationship between the selected factors namely economic return to the firm, personal career development of driver, reputation of firm that influence the drivers' training. Respondents consisted of representatives from the logistics firms especially the person in charge of the training and development or the human resource department managers in the firms. A survey method was utilised where 256 small and medium logistics firms were selected using a stratified random sampling method from a list of small and medium logistics companies. Questionnaires were distributed to all the selected small and medium logistics firms to gather the information. A total of 110 sets of questionnaires had been returned giving a response rate of 43%. The result of the present study indicate economic return to the firm and personal career development of driver were found to have positive significant relationship with drivers training. Implications for the findings of the current study and directions for future research are discussed.

Keywords: Commercial vehicle drivers, Small and medium logistics firms, Training

1   INTRODUCTION
The logistics industry in Malaysia has grown by 10.3 percent to RM129.93 billion against an estimated RM117.8 billion in 2011 due to the rapid growth bacause of the advance demand of services and competrition among companies. The impact of growth in this logistics industry has subsequently given significant growth in transportation especially for road transport. These changes are reflected by the increase in number of logistics firms which has created job opportunities for commercial vehicle drivers (CVD) in the shipments of raw materials, spare

parts from endors, and the finished goods to consumers. However, with the increase in CVD in Malaysia, road accidents has subsequently on the rise too. Road accidents became one of the top ten major factors of death in Malaysia, and accidents involving CVD are increasing with the statistics of accidents involving lorry drivers for the year 2008 was 44,683 cases and has risen to 65,944 cases for the year 2009 (Royal Malaysian Police Force Record, 2010).

Many factors have been put forward as the main cause of road accidents such as the road, traffic lights, driver's factor, vehicle condition, speeding, road lighting and others. One major factor that is of importance here is the driver's competency in handling the vehicle.

Competency is usually associated with highly professional performances. Competency is defined as a behavior or a set of behaviors that reveal mastery at work and can be applied in the determination of work standards, formulation of strategies in describing individuals and teams, formation of authority and responsibility, and the extension of desicion making (Hsieh and Chihuikao, 2003). Developing drivers' competency is an immense task and responsibility. A competent driver is one that reveals a mastery of work. One way to improve driver's competency is through training. The government of Malaysia has spent a huge amount of investments for training in Malaysia in the hope of enhancing the competency of drivers in the country. There is no denying that training plays a pivotal role to boost the competency of CVD in the logistics industry.

A CVD's training will further develops one's skill and also improves his performance. However, the number of small and medium logistics firms that participated in providing training to CVD are very much lacking. The ignorance of the logistics firms to provide training can be considered as a barrier to the improvement of CVD's skills to achieve competence level (Johnson, 2002). Most small and medium logistics firms attested they have insufficient levy given by the government to send their CVD for skills upgrading. Thus, the purpose this study was to investigate the relationship between factors that influence the need for drivers training. Specifically, the study objectives are to (i) identify the factors that influence the need for CVDs training among small and medium logistics firms, and (ii) determine the relationship between the factors of economic return to the firm, personal career development of driver, reputation of firm that influence CVDs' training.

2   LITERATURE REVIEW
Driving is a complex task that involves the performance of a range of visual, physical, cognitive and perceptual functions in a dynamic traffic situation. CVDs have big responsibility and they are the person representing the firms thus, making sure CVDs are competent should be the responsibility of the hiring firms.

Training has been accepted as a viable human resource practice to get workplace transformation (Pidd, 2004). Training is regarded as an investment. Every investment bears a return on investrment (ROI) value. Training affects attitudes of employees, and according to Brinkerhoff (2006) if they show positive behavior change on job, expense on training becomes an investment. A review of training and development literature shows that many small and medium logistics firms in Malaysia still do not consider training as an important function of the firms that could contribute to the firm's success. Instead, many firms consider training and development as cost incurred which little attention was paid. The lack of emphasis among small and medium logistics firms on training has consequences on the skills and competency of these CVDs.

Driver's training means improving driving skills and knowledge (Christie, 2001). The increased rates of accidents were found to be due to the lack of skills, thus, training and education appears to be a counter measure to such problem (Evans, 1991). Research has demonstrated that there were marked improvements in accident risks when drivers engaged in training (Anderson, Ford and Peck, 1980). The driver's training is also aimed at increasing the vehicle control and handling skills of the drivers (Christie, 2001). With training, drivers will have good handling skills, thus improving their performance.

A number of researchers have identified that some of the small and medium logistics firms are ignorance towards the importance of drivers' training (Storey, 2004; Panagiotakopoulos, 2011).

The current research focused on the relationship of the three important dimensions, namely; economic returns of the company, personal career development of the driver, reputation of the company and driver's training. The framework for the study is shown in figure 1.
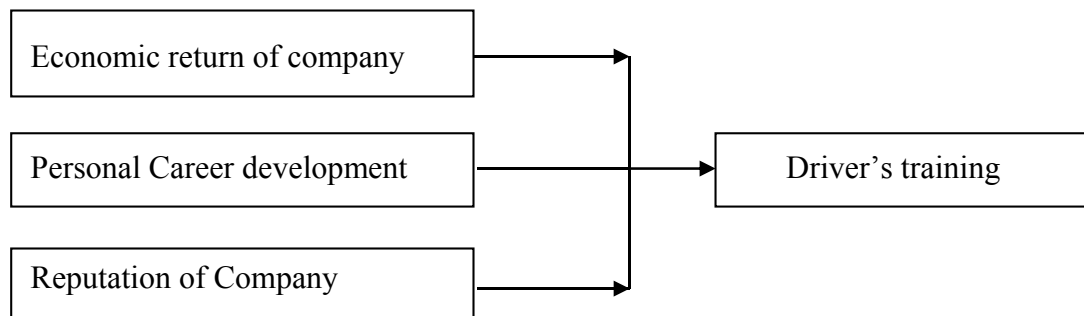
Figure 1: The theoretical framework of the study

3 METHODOLOGY

The population for this study comprised of small and medium logistics firms in Selangor. The total number of these firms is 552. From this number, a total of 256 small and medium logistics firms were randomly selected to participate in this study. Stratified random sampling method was utilised from small and medium logistics firms. Once the firms were identified, a set of questionnaires were distributed. This study measured whether the variables of economic return, personal career development and reputation of the firm do have any influence on small and medium logistics firms' ability to provide training to CVDs. The individuals chosen as repondents in this study comprise of representatives of the logistics firms especially the person in charge of the training and development in the firms or the human resource department managers.

Since this is a quantitative study, questionnaire survey was developed for the purpose of collecting data. Prior to the development of final questionnaire, discussions with focus groups which comprise of experts in training in logistics industry was conducted. Four multi-item constructs were considered in this study, referred to as economic return of the firm, personal careed development of driver, reputation of firm and drivers training.

3.1 Measures and variables

Items included in the survey questionnaire were selected after a review of literature and focus group interview were done. There were altoghether 28 items that were used to represent the

three dimensions of the independent variables and 8 items represented the driver's training. Factor analysis was conducted on all the 28 items where 6 items had to be deleted resulting in 22 items that were finally used for reliability analysis.

The questionnaire has been divided into three sections; section A was designed to measure firm's profile. Section B measured the information pertaining to commercial vehicle drivers' training as a dependent variable and section C was designed to measure the independent variables; namely economic return of the company, personal career development of driver, reputation of the company. All the questions items were measured on the seven point Likert scale ranging from very strongly disagree (1) to very strongly agree (7) for sections B and C. The data were screened using SPSS and descriptive statistics were run to obtain the sample profile.

4   RESULTS AND DISCUSSION

The respondents for the current study made up of representatives of the logistics firms especially the person in charge of the training and development in the firms or the human resource department managers. A total of 256 sets of questionnaires were distributed to all the respondents identified. From this, a total of 110 sets of questionnaires were returned giving a 43% response rate.

The types of business organizations of the samples comprises 42.7% (n=47) corporation, 30% (n=33) partnership, 24.5% (n=27) sole proprietor, 2.7% (n=3) others. In terms of types of ownership, the sample was representative of larger number of Local Company (Non-Bumiputera) respondent with sample comprises 50.9% (n=56) respondent, 36.4% (n=40) Local Company (Bumiputera) respondent. The least represented group (n=2) is the foreign/multi-national. 10.9% (n=12) represent others respondents.

4.1   Demographic profile of firms

In terms of the number of firms that have commercial vehicle drivers; there are 60.6% (n=66) firms that has between 5-19 drivers. Around 21.8% (n=24) has a strength of 20-50 drivers and 17.4% (n=19) firms has drivers less than 5.

On the other hand, figure 2 shows the number of firms that engage drivers as sub-contractors. Approximately 24 (48%) of the firms have less than 5 drivers as sub-contractors, 22 (44%) have between 5-19 drivers as sub-contractor and 4 (8%) have around 20-50 drivers as sub-contractor.
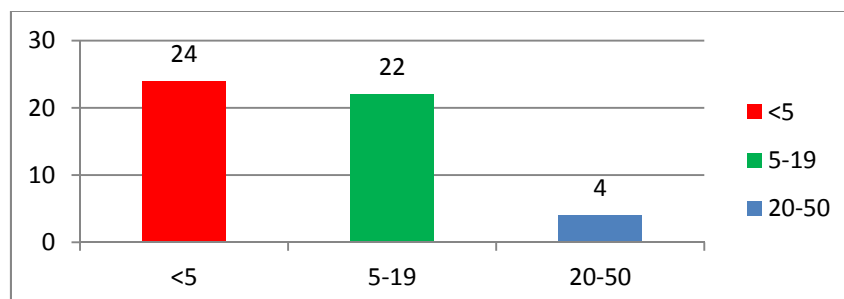
Figure 2: Number of drivers as sub-contractors

Enterprise in Turbulent Environment

The total number of firms that have 5 – 10 rigid trucks was 40% (n=40), 30% (n=30) have less than 5 rigid trucks, 23% (n=11-20) firms has between 11-20 rigid trucks, 6% (n=6) represent firms that has 21-30 rigid truck and only 1 firm (0.9%) has 31-40 rigid trucks.

Figure 3 depicts number of employees in the firm (all employees including commercial vehicle drivers). There are 87 firms (79.1%) that has between 20-50 employees, followed by 21 firms (19.1%) with 5-19 employees and one firm (0.9%) has less than 5 employees.

Fgure 4 depicts the training that the firms offer to CVD. The majority of the respondents 59.1% (n=65) do not offer any training to commercial vehicles drivers. Whereas only 40.9% (n=45) offer training to commercial vehicles drivers.
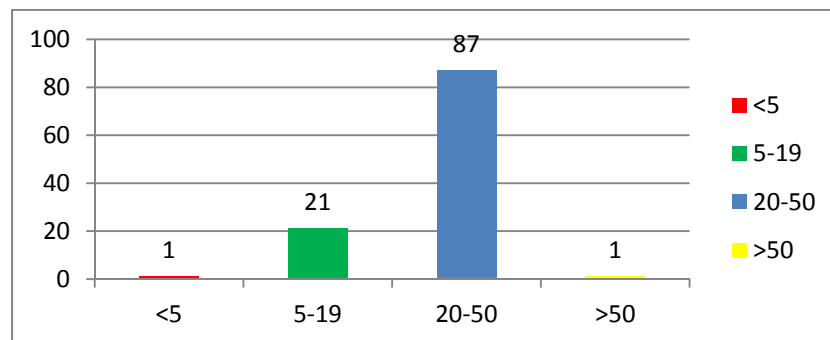
Figure 3: Total Number of employees
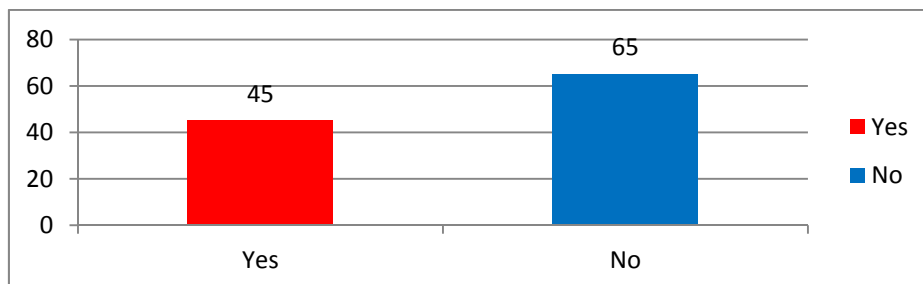
Figure 4: Firms that offer training to commercial vehicles drivers

Figure 5 depicts that 22 (47.8%) firms offer training only once a year to their commercial vehicles drivers. 17 (37%) firms offer training 2-4 times in a year and only 7 (15.2%) firms provided 5-7 times of training in a year to their commercial vehicle drivers.
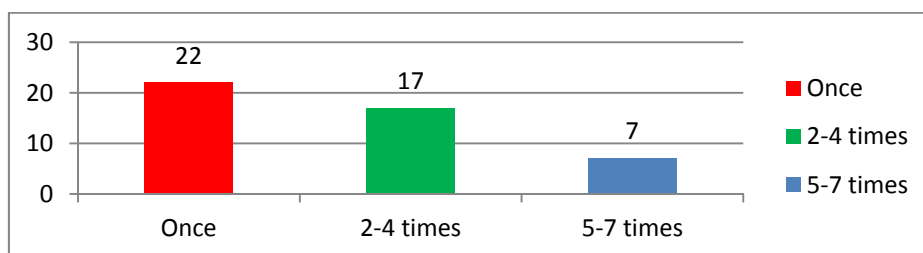
Figure 5: Frequency of training in a year

Reliability analysis was conducted to test the level of internal consistency for the measurements of all the constructs in the study. The Cronbach alpha obtained for all the constructs is depicted in Table 1. The reliability score range from 0.50 to 0.60 is considered sufficient for the early stage of the study [11]. Nine items were used to measure the perception on economic return (α =.98), for perception on personal career development, a total of five items were used (α = .97), and eight items were used to to measure perceptions of firm's reputation (α =.97). All the measures were found to be acceptable and reliable for the test.

Table 1: Reliability Coefficient

No.	Dimension	No of items	Cronbach alpha
1	Perception on economic return	9	.98
2	Perception on personal career development	5	.97
3	Perception on reputation of firm	8	.97

Perception on economic return, perception on personal career development and perception on reputation of the firm which were treated as independent variables were posited to influence driver's training. The dependent variable driver's training was regressed on all the variables of perception on economic return, perception on personal career development and perception on reputation of the firm. Table 2 displays the result of the regression analysis. The model was significant with R^2 = 0.621 and F value = 87.683. This means that 45% of the variance in the dependent variable (driver's training) was explained by the variance in the independent variable. As the table shows, both economic return (β = 0.425, $p<0.05$) and career development (β =0.451, $p<0.05$) significantly predicted driver's training [$F_{2,107}$ = 87.683, $p<0.05$].

These results provided evidence that perception on economic return and perception on career development have positive and significant effect on the dependent variable driver's training. However, it was found that variable reputation of company did not have any significant relationship with the drivers training. Thus, this study also provided evidence that reputation of company has no positive or significant effect on the dependent variable driver's training. From the table 2, it can be determined that the most important factor that influence outcome variable namely drivers training is perception on economic return (β = 0.52) followed by perception on career development (β = 0.29).

Table 2: A Summary of Regression Analysis

Dimension	β	Std. Error	sig
Perception on Economic return	.52	.091	.000
Personal Career development	.29	.170	.009
Perception on Reputation of firm	.23	.150	.105

df =2,107 , F =87.683 , R^2 = 0.621

4   CONCLUSION

The aim of this study was to investigate the relationship between factors of perception on economic return, perception on career development and reputation of company that influence the need for drivers training in Malaysia. Overall, the majority of the respondents in this study

perceived that economic return and personal career development of CVDs do influence drivers' training. This implies that firms will send drivers for training when they perceived the economic return to the firms and also if they perceived that career development of the drivers will be enhanced. The study also revealed that small and medium logistics firms are very concerned in providing training to the CVD because training is always seen not as an investment, but more on a cost to the small and medium sized firms.

The issues of providing training are increasingly becoming important not only to small and medium logistics firms but also among the large logistics firms. This is because understanding the various factors affecting training would ensure that these firms will have competitive advantage from the competing firms. A comprehensive empirical approach is needed to explore the relationship between these factors and driver's training.

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ESSENTIAL COMPETENCIES TO THE PHARMACY INDUSTRY COMPETITIVITY: NATAL CITY COOPERATORS CASE STUDY - BRAZIL

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ABSTRACT
The Pharmaceutical Industry is one of the most promising markets in the world. It is highly competitive, complex and requires huge investments in research, development, production, marketing and sale of pharmaceutical products. One of the main strategies of the pharmaceutical industry is the promotion of its products for the medical fraternity through drugs sales representative, essential for the acceptance and prescription of your brand. This study identifies the essential drug promoter skills to competitiveness and the success of these organizations. Data were collected through semi-structured individual interviews and resulting forty six competences mentioned as most important by own sales representatives. The research points to the need for new methods of empowerment, essential to the competitiveness of sales representatives, considering that these competences contribute for industry establishes its strategies.

Keywords: *Competences, Competitiveness, Pharmaceutical industry*

1   INTRODUCTION

The research, development and production of drugs are fundamental to maintain health. With time the pharmaceutical industries have evolved over their role as manufacturer of medicines to innovator, provider of information, employer and a significant player in the world economy (Das, 2011). Porter (2004) points out that, besides the global environment that businesses are located, they should worry about their competitors, suppliers, customers, substitutes and potential entrants that influence competition in your industry generating profits.

There is an observable growth of investments in pharmaceutical laboratories in Brazil, aligned to population purchasing power, increasing the job opportunities for this category. Supporters

of pharmaceutical promotions claim that marketing expenditures give innovative pharmaceutical manufacturers a fair chance to recover high R&D expenditures (Kremer et al., 2008). The pharmaceutical market is a specialized field that requires knowledge in drugs and sales skills by the sellers that sells the product to a customer (doctor) who has more scientific knowledge. It is known, the importance of competency management in this scenario, aligning human resources managements with business strategy incorporating the concept of competence.

In this market, consumers do not always choose the product because is the doctor who prescribes the medication and decides be more appropriate to the patient. To Rubin (2003) marketing may serve as a communication channel to educate physicians and expose consumers to information that may improve their health outcomes and medical options. This is reason to take promotional and commercial actions with the physicians and competent distributors (drugstores and wholesalers) in order to reach their planned objectives. Such spending benefits both patients and physicians in a variety of ways. The pharmaceutical representatives are valued highly by physicians as a reliable source of information. Kobayashi and Leite (2010) assert that these professionals must be increasingly qualified and updated, so the investments could revert to keep the competitiveness of the organization.

The question refers to the importance of core competencies of the pharmaceutical representatives as competitiveness in the city of Natal, RN, Brazil, outlined the following specific objectives: to identify individual skills, classification of competencies (knowledge, skills and attitudes) and characterization of the pharmaceutical representatives activities.

2   COMPETENCES AND STRATEGY

Organizational competencies stem from the specificity of each company to identify its resources and turn them into competitive advantage. It is noteworthy that the process to transform resources into organizational competencies happens in the competitive scenario and moves the dynamic of the organizational.

This way, the strategy emerges linked to the company's competences, while its separation into personal competences goes through hierarchic levels and work teams. The effectiveness of the organization results of the ability to articulate their strategic guidance and expertise of the company, group and individual skills. Therefore, establishing the strategic direction, aligning the organizational competences and separating into individual competences reflect the organizational culture and the management model (Moura and Bitencourt, 2006).

Mintzberg et al. (2008) pointed out that both organizations and strategies exist independently. However, one influences the other, since strategies are constructed from a previously organizational framework, and be evaluated by the strategic management at some moment. This can be conditioned, either by need to change as well as for the survival of the organization. Therefore, the strong and weak points and the opportunities and menaces must be considered as a start point to build a new management strategy. The strategic management plays an important role in the characterization of the diverse and complex organizational processes, contributing to create a kind of management focused on the efficiency and the search for better results (Queiroz et al., 2011).

The word competence associated to human resource management originally appeared in a paper published by David C. McClelland in 1973: "Testing for competence rather than

intelligence" (Daólio, 2004; Dutra, 2004). The concept of competence is though as a set of knowledge, abilities and attitudes justifying a high professional performance (Fleury and Fleury, 2004). To Le Boterf (2003), by embracing knowledge, skills and attitudes, competence is something that requires a continuous motion, a constant mobilization of diverse knowledge for application to a specific situation. Hence, it can be said that to be competent, the professional needs knowledge, abilities and attitudes which are specific to practice his activities. In other words, the professional must have attitudes and abilities enabling him to mobilize his knowledge, at a precise time, to reach a particular goal, in order to solve a specific problem.

For this study, we consider competence as a set of knowledge, abilities and attitudes providing the professional and a better performance of his functional attributes, with efficiency in developing the activities and success. Organizations situated in competitive environments need to define its strategy and the necessary competences in a continuous learning.

2.1 Individual competences

To Zarifian (2001), individual competences are those regarding to each professionals of the organization. These are skills that the individual possesses by his educational background, family creation and his biography. Business competences refer to the comprehension that a person must have about the "business" of the organization and the organizational goals, as well as a comprehension of the social and political environment surrounding the organization. In this sense, a good professional must incorporate competences, or improve those already present, according with his experience in the environment.

A switchover between organization and persons is perceivable, both sides have effective participation in the process of professional growth. A professional unable to move his knowledge, information and abilities to solve an immediately solvable conflict, becomes unproductive for reaching the organizational goals (Le Boterf, 2003). Therefore, competence refers to the professional capacity to associate all his personal qualities in order to get a better performance in his acting area.

2.2 Management competence

From the decade of 1990, Prahalad and Hamel (2004) developed the concept of essential competences in organizations. Such competences are a set of abilities and technologies resulting from contributing a fundamental difference for the competitiveness of the company. The identification and skills development are imperative for the organization to define its action strategies in a complex and ever changing world. The companies are able to detect just a limited number of basic competences giving them strategic and sustainable advantage in the market. Competence management gains importance and is perceived as a management model derived from the Resource-Based Theory of Management.

Bitencourt (2005) points out that competence can be summarized and associated to the development of concepts, abilities and attitudes. Besides, they constantly rise questioning and trigger a process of individual learning. The competences are transferred and consolidated by the relationship (interaction).

2.3 Identifying competence

Fleury and Fleury (2004) and Dutra (2004) highlight the importance of Competence-based

management. Two models: the *American Society for Training and Development* (ASTD) and *Competency-Based Management* were the first ones to stand out identifying the competences.

The research in Skills Management involves different approaches, including the views of managers, employees and customers. The methods and techniques adopted to identify competences have the following features: observation of high performance employees behavior in order to delineate their qualities; application of semi-structured focused interviews; brainstorming; brain-writing; surveys; and modeling by specialists.

2.4 Medical advertisement strategy

Medical advertisement is defined by the World Health Organization (WHO) as all informational and persuasive activities by manufacturers and distributors to influence the prescription, supply, sale or use of drugs (Norris et al., 2007).

The industries concentrate its investments and efforts to develop drugs to treat chronic diseases that require ongoing prescriptions for longer periods (Rey, 2010). On the other hand, Palacios (2008) brings out that the use of sophisticated marketing and advertisement techniques, and the relationships established between physicians and pharmaceutical representatives are potentially harmful for the users and therefore it makes evident the importance of regulating medical advertising.

One of the main links between the pharmaceutical industry and the physicians is its sales force, the pharmaceutical representatives or medicine advertisers, who are employed and earn their salaries working to attend the interests of their employers (Brody, 2005). In this sense, some difficulties rise from different beliefs and interest values existing among doctors, patients and third parties, including the media and the pharmaceutical industry (Neolan, 2012).

The Brazilian resolution establishes a difference: for over-the-counter medicines, advertisements can be addressed to the consumer, but for prescription drugs (either with or without retention of the prescription), the advertisement must be addressed just to professionals entitled to prescribe them, though communication channels restricted to them. There are two different segments for pharmaceutical marketing: the market of over-the-counter medicines (OTC) and the markets for strictly prescription medicines, acquisition is done through medical prescription. There are one resolution regulating the activities of pharmaceutical representatives, determining that these professionals "must be limited to scientific information and characteristics of the medicines registered by the National Health Surveillance Agency".

The ethical matter about physicians and pharmaceutical representatives relationship have been widely discussed in the literature, evidencing a debate about conflicts between medicine users (patients) and the pharmaceutical industry, which, through the pharmaceutical marketing plans a series of promotion and advertisement techniques directed to the doctors. The use of freebies, free samples, invitations to events, lunches and gifts are the central point of this debate (Fugh, 2007; Gagnon, 2008; Palácios, 2008; Wazana, 2000).

3 METHODOLOGY

The study was performed based on qualitative search (semi-structured interview) with the intention to release the expression of ideas, thoughts and opinions from the own

pharmaceutical representatives. From the point of the objectives, this research is characterized as descriptive, as it intends to describe the features of a given phenomenon and to establish the relationship among variables. Sampling is non-probabilistic and the selection is made by typicality (Vergara, 2000), developing medical advertisement activities in the Natal market.

This work adopted a model praised by Dutra (2004) and Fleury (2004): competences can be surveyed based on their components of knowledge, abilities and attitudes. The universe of the research was the group of pharmaceutical representatives, city of Natal, RN, Brazil. Information about functional competences was collected from 35 pharmaceutical representatives from a whole universe of 250[1], representing 18.8% of the professionals at Natal. These professionals develop their work though health professionals visits, mostly physicians of different specialties. They promote and advertise pharmaceutical products manufactured by several pharmaceutical companies.

3.1 Interviews
As a first procedure for collecting data on individual competences, a semi-structured individual interview was applied to thirty five pharmaceutical representatives. For the semi-structured interview, a script was used containing: a heading indicating the date of the educational institution; identification of the post-graduate program; the name of the searcher and the title of the work related to the research; definitions of organizational and individual competence; and the question to be answered: "based on the typical activities of the pharmaceutical representatives and the competences that you consider important for the pharmaceutical representatives".

The thirty five pharmaceutical representatives were interviewed individually, in different moments and places according to their convenience. Firstly, a brief explanation was made about the reasons, what was the research about and what was it for. It was emphasized that the data provided were strictly intended for academic research.

4   RESULTS AND DISCUSSION

4.1   Competences identified in the interviews
Forty six competences were identified in the interviews in the requirements: knowledge, abilities and attitude according to Table 1.

Among Knowledge requirements, four competences were considered relevant, cited frequency higher than 60% by the interviewed professionals. At the knowledge requirements standing out as the most relevant:
- sales techniques,
- planning techniques,
- advertisement techniques and
- negotiation techniques.

These competences are related to the application of the daily activities knowledge of the pharmaceutical representatives, such as supplying information in an efficient and effective way to the highest number of health workers. For this, they prepare activities and promote products through advertising techniques, promotional material, freebies and gifts, in order to gain the medical prescription, a fundamental point to increase the sales and consequently reach the planned goals of the company. The pharmaceutical companies frequently work out

these competences in their trainings, providing this technical knowledge to their professionals in order to transform these individual competences into useful company competences. Other two competences identified were foreign language and product composition, which interviewed professionals believe essential knowledge in order to inform, negotiate and convince the doctors to prescribe.

Among the requirements of abilities, the competences stand out with more than 60%:

- good human relationship,
- communication skills.

The results point toward a concern of the professionals about how to communicate and relate with the clients. It is evident the importance attached by pharmaceutical representatives to personal relationship skills and communication skills related to their daily activities. Based on these data, know how to deal customers is very important for the performance; as well as communicate in a clear concise and transparent way. Among these requirements, it worth to consider the importance perceived to the following competences: work under pressure taken as relevant in spite of receiving lower scores (less than 60%). The ability to work under pressure is one of the new realities of the modern world, and it is very evident in the pharmaceutical market. The strong competition and high investments on research and development, beyond establish goals to be attained by their collaborators, as way to get higher profitability.

None attitude requirement reached 60% in its score, but empathy, professional ethics and initiative got 54% and integrity reached 51%, hence being the most cited competences, evidencing the preoccupation about professional behavior and the doctors, colleagues and patients relationship. The ethics issue got much attention as a result of discussions, raised by researchers and experts, about the limits and acceptable conduct of pharmaceutical representatives trying to convince the physicians about a medical prescription. Another competence to stress is empathy, which is also considered a quite relevant competence, as professionals relate empathy with a better performance of their functions.

Table 1: Knowledge, abilities and attitudes detected in the interview session, considering significant proportion (own resource)

KNOWLEDGE	IMPORTANCE (%)
Sales techniques	77%
Planning techniques	71%
Advertisement techniques	66%
Negotiation techniques	60%
Foreign language	54%
Products composition	54%
Informatics and internet	49%
Good manners	43%
Human relationships, Professional norms, Memory techniques, Notions on human health, Politeness, Good Portuguese.	Less than 40 % (each)
ABILITIES	IMPORTANCE (%)
Good human relationships	77%
Communication skills	69%
Work under pressure	54%
Good memory	51%
Ideas synthesizing capability	51%
Decision-making capability	49%
Vehicle driving	46%
Informs writing, Continuous learning capability, Innovation capability, Creative capability, Sense of organization, Team work, Integral dedication, Concentration, Logical reasoning.	Less than 40% (each)
ATTITUDES	IMPORTANCE (%)
Empathy	54%
Professional ethics	54%
Initiative	54%
Integrity	51%
Motivation	49%
Flexibility, Good personal appearance, Team spirit, Professional position, Enthusiasm, Discipline, Responsibility, Commitment, Dedication, Good Sense, Patience.	Less than 40 % (each)

5 FINAL CONSIDERATIONS

The present work detected the essential competences to pharmaceutical representatives acting in Natal, by own perspective. As a whole, 46 competences were identified. These competences were classified into knowledge, abilities and attitudes. Knowledge on sales techniques, negotiation techniques and planning techniques are competences related with knowing how to do, daily activities of medical advertisers to plan their work, to know how to negotiate, to be able to identify the needs of their clients and demonstrate the advantages and benefits of the promoted products. As evidenced by Fleury and Fleury (2004), knowledge competences are those related with a potential to do, and competences identified among the

requirements of attitude are those showing a capability to do and denote personal habits.

Pharmaceutical representatives are professionals that transfer information about diseases and medicines, and in this case it is fundamental to have the ability to create and keep good relationships, and communicate in a clear and objective way. These relationships between physicians and pharmaceutical representatives are built through respect and ethical behavior, based on empathy and integrity (Palacios, 2008). It is necessary the ability to create and keep good relationships, abilities to communicate in a clear and objective way, and work under pressure, in response to the high competitiveness of this market. Some attitudes are essential: empathy, professional ethics and integrity, which are competences related to conduct and behavior, in the daily activities visiting and promoting pharmaceutical products to health professionals. It was observed that these professionals, in daily activities, carry out complex activities demanding these competences in order to reach objectives and the goals imposed by the pharmaceutical industry.

This work highlights the importance of knowledge, abilities and attitudes for the pharmaceutical representatives in order to attain results for the pharmaceutical industry. In this sense, it is necessary increase the investments to develop new manuals for teaching and training pharmaceutical representatives in order to turn them more capable and aligned new realities of this market. This will make pharmaceutical representatives force more conscious about the necessary essential competences. The survey still pointed out that the competences of sales techniques, good human relationships, to know how to communicate or communication skills and work under pressure as relevant.

The competence considered the most relevant by survey was sales techniques. This result indicates that knowledge on sales techniques is essential for the good performance of this profession, as evidenced in previous studies (Brody, 2005; Medawar, 2002; Wazana, 2000; Maguire, 1999; Norris, 2007). This competence is related to sales activities include: knowledge about the client's needs, about benefits and advantages of the product and to be capable of keeping commercial relationships with the doctors.

Planning and negotiation techniques are competences related to knowing how to do and knowledge. Planning and negotiation are related to the daily work of the pharmaceutical representatives. Before the visits, they need to structure a plan called "pre-visits", daily and weekly schedules and the client profile. The negotiation technique, on the other hand is necessary to go around questions and to convince doctors to prescribe their brand.

These results show that, besides knowing how to do, the pharmaceutical representatives must have the skills to do. In order to be able to transfer knowledge, the professionals need to read study and retain knowledge in a constant and continuous way, and therefore, good memory is relevant.

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STRUCTURE OF COMPANY BOARDS[1, 2]

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ABSTRACT
Corporate scandals throughout the world have brought attention to company boards whose primary role is to give the so called „tone from the top". In most cases it has been determined that corporate scandals have occurred due to the lack of proper corporate governance structures, improper structure of corporate boards as well as corporate board practices. This paper will present current trends with regards to company boards, their structure and practices. The authors will point out the bad company board practices in several corporate scandals as well as emphasize good practices and improvements that should have been made in those cases.

Keywords: *Boards structure, Corporate governance, Corporate scandals*

1   INTRODUCTION

Economic crisis is still present all over the globe. Euro zone crisis, a high level of indebtedness of countries, high unemployment rates and illiquidity problems have influenced to a great extent every day company operations. We have all witnessed deep structural reforms in the economic systems of many countries which created some new reality and rules for companies. Each and every company, across the world, no matter in which sector it operates, is affected by these changes.

Today, companies struggle with changed economic systems and „rules of the games", and they have constantly numerous questions on their „plates": how to increase productivity, how to be more efficient, how to cut costs, how to raise reputation etc. Realizing the consequences of the global economic crisis, companies are even more assured that a part of its origins stems from a variety of corporate governance weaknesses and failures. Moreover, the crisis has showed that companies not having the proper corporate governance structures suffered the most - individuals were truly disappointed with actions and behavior of high level management in many companies, whose decisions contributed greatly to the failure of their respective businesses and creation of a domino effect in the whole world, while investors started pooling out their investments firstly from the companies with a low level of corporate governance practices. For those investors the low level of corporate governance was connected with the high level of risk.

The crisis and subsequent consequences have highlighted the areas of particular concern regarding corporate governance. Failures of risk management systems in several cases were closely related to the encouragement and rewards for the high level of risk taking (Kirpatrick, 2009). Since risk guidance and review are key responsibilities of the Board, this leads us to a conclusion that in most cases the Boards were ineffective, they haven't challenged the senior management and they probably did not have the right competencies, composition etc. For those reasons, this paper will focus on corporate Board structure and composition. In the first part of the paper we will present several corporate scandals which have happened due to the improper structure of corporate Boards as to point out to the failures of corporate governance practices. Results of the research regarding corporate Board structure will be showed in the second part of the paper as to point out the existing practices around the world. In conclusion we will create remarks regarding current trends and emphasize good corporate governance practice related to Board structures.

2   WHY BOARD STRUCTURE IS IMPORTANT?

Best corporate governance practices imply that Boards should have:
- the appropriate number of executive, non-executive and independent directors;
- the right mixture of skilled, knowledgeable and experienced individuals;
- the right procedures and rules as to allow each of the Board members to make informed and liable decisions.

The right balance between executive, non-executive and independent directors is necessary as to preclude the possibility for individuals or small groups to dominate the decision-making process (IFC, 2008). Non-executive directors contribute greatly to the Board with their external insights, additional expertise, experience and knowledge. On the other hand, an independent director is a person who does not have any business, family or other ties with the company, the owner of the company, members of the Board or executives, who could influence his/her objective and independent decision-making. Independent directors can make a substantial contribution to important decisions of the company, especially in evaluating executive performance, setting executive and director remuneration, reviewing financial statements, and in resolving corporate conflicts.

Several researchers have showed that boards with greater number of independent directors have better performance (Jensen and Meckling, 1976; Shleifer and Vishny, 1997). The main reason why independent directors are needed on Boards is related to the managers' behavior which is individualistic, opportunistic and self-serving. Also, it is expected that independent directors do not put personal interests and activities in front of their professional duties (Eisenhardt, 1989; Fama, 1980; Fama and Jensen, 1983; Jensen and Meckling, 1976). This theory also supports the view that those independent members (who are in the same time non-executive directors) can better supervise the work of executive members in the Board (Ramdani and Witteloostuijn, 2010). Many empirical studies have proven that Boards are more efficient, more insightful and that they undertake a better monitoring of the senior management when greater number of women and non-executives sit on them (Higgs, 2003; Hagendorff and Keasey, 2008; Mateo et al, 2009; Bear et al., 2010). Moreover, researchers have shown that foreign investors as non-executive directors also have positive impact on firm performance. This conclusion is related to the fact that foreign investors lead towards improvement of corporate governance practices and foreign directors also send positive information signaling to the capital market (Black et al., 2006). To support this argument,

Oxelheim and Randoy (2003) showed that firms in Norway and Sweden that have foreign investors in their Board achieved better performance.

All the above mentioned facts imply that independent and non-executive directors add value to the company performance. Despite that fact, roots of several corporate governance scandals and failures of companies happened due to the inadequate Board composition and structure. Here we will describe Lehman Brothers case study, considered by many as a trigger of the crisis, and one of the most recent ones related to Olympus.

2.1   Lehman Brothers case study

Lehman Brothers Holdings Inc. (LB) was a global financial services firm. Before declaring bankruptcy in 2008, it was the fourth largest investment bank in the US. Founded in 1850, Lehman was also the oldest investment bank in the US. In early 1980s, after a serious internal power-struggle coupled with a downturn in the markets, than CEO Lewis L. Glucksman was forced to sell the firm to American Express. A decade later, in 1993, American Express began to divest itself of its banking and brokerage operations and in 1994 it spun off LB in an initial public offering. Richard S. Fuld was appointed as CEO-Chairman of LB and he led the firm until its very end.

Lehman performed quite well under Fuld. Since going public in 1994, the firm had increased net revenues over 600% from $2.73 billion to $19.2 billion and had increased number of employees over 230% from 8,500 to almost 28,600.

At the 2008 ALB China Law Awards, LB was crowned Debt Market Deal of the Year and Equity Market Deal of the Year. By 2008, Fuld had been with the company for 30 years. In fact, he was the longest-tenured CEO on Wall Street.

Yet, the same year, on September 15, LB announced it would file for Chapter 11 bankruptcy protection. It became the largest US bankruptcy based on assets ($639 billions). A legitimate question is how this could have happened?

Board Composition - An effective board is one that is competent, active and independent. The LB Board had 10 members. Only one of them, Fuld, was an executive director. At the same time Fuld was both CEO and Chairman of the Board. Although, at first sight, this might imply that the LB's board was independent and better equipped to monitor the executives, it proved not to be the case. In addition, the fact that none of the other executives was in the Board accentuated the existing unbalanced power of Fuld at the executive level. Indeed, in 2007 Fuld earned almost three times more than the four most senior executives beneath him did on average (Nestor Advisors, 2009).

Age - While age is often cited as a good thing for board members since it presumably means more experience, an ageing board might present significant risks. Specifically, older directors might be less tuned to an ever-changing business environment and a bit out of touch with an aggressively growing financial sector and its myriad of exotic financial engineering products. It is logical to expect that old directors have lower sensitivity to their professional reputation and future employability. In LB, an average age of non-executive directors was 69.4. In fact, LB had five directors aged above 72. For comparison purposes, the average age of non-executive directors in the 25 largest European banks is 60 (Nestor Advisors, 2009).

Tenure - Companies should maintain their vitality, flexibility and ability to adapt to new challenges by changing the composition of their board of directors from time to time. An optimal term of directors is not strictly defined and might differ from company to company. Directors should have a term long enough to be able to take a longer-term perspective (crucial for their strategic role) and to be able to see the results of their efforts. On the other hand, directors tend to lose some of their (independent) edge if they remain on a board for too long. The Board of LB was an entrenched board. The average tenure of non-executive directors in the LB board was 9.4 years. In contrast, an average tenure of non-executive director in the 25 largest European banks is 5.6 years (Nestor Advisors, 2009). Such a long tenure contributes to a lack of independence which, coupled with a lack of an adequate expertise, allowed Fuld to be almost the sole decision-maker who was not effectively questioned by anyone.

Financial industry expertise - The Board should be comprised of members who together have the knowledge, capability and professional expertise necessary for successfully managing, directing and overseeing the company. Best practice recommends certain competencies for all boards, irrespective of the company. These are: industry experience, business judgment, and special skills such as financial acumen and legal knowledge. For LB, financial sector expertise was crucial. However, only 10% of the LB Board had this expertise (Nestor Advisors, 2009). Board diversity might be a good thing. However, if we know that one of LB directors was a theatrical producer and the other a retired rear admiral of US Navy we can legitimately question capability of these directors to effectively oversee one of the most complex balance sheets in the US financial industry.

Risk oversight - Henry Kaufman, formerly of Salmon Brothers, chaired the risk and finance committee. However, he was already over 80. The other member of this committee did not have a robust enough financial sector expertise. The committee met only twice throughout 2007. Does it mean that LB did not have a risk management function? Probably not. LB, at least on paper, had very sophisticated risk management systems and the teams of experts to manage it. Still, the function was not properly addressed at the board level. The board should ensure that systems that are established enable the company to assess and control risks. The fate of LB shows that its board failed to successfully perform this task.

Incentives - Were Fuld and the other executives inadequately incentivized? It is a fair estimate to say that Fuld had more of his net-wealth to lose than many of his peers. By making the wrong decisions and taking the wrong risks he ruined himself as much as he ruined the company and its shareholders. Thus, the LB case proved that an adequate alignment of the CEO's interest with the shareholders' interests cannot substitute for the board's oversight.

2.2   Olympus case study

Olympus is a major Japanese manufacturer of optical equipment founded in 1919 by Takeshi Yamashita and under the name Takachiho Seisakusho. It initially specialized in microscope and thermometer businesses. In 1950s Olympus introduced its first camera. Olympus is listed on the Tokyo Stock Exchange.

In September 2011 Olympus promoted the first ever non-Japanese chairman as a CEO. Mr. Michael Woodford had worked for Olympus for 30 years. Before that Woodford was chief operating officer, while he previously worked as executive managing director of Olympus Medical Systems Europa.

Only two weeks after the promotion into CEO, Woodford was fired. Woodford alleged that his removal was related to several prior acquisitions he had been seeking answers to, particularly the US$2.2 billion deal in 2008 to acquire British medical equipment maker Gyrus Group. The major question in this case was related to the US$687 million paid to a middle-man as a fee – a sum equal to 31% of the purchase price. Further investigations showed that in several acquisitions between 2003 and 2009 similar practices were undertaken. This revelation led to the Olympus confession that their accounting practice were not appropriate and that US$1.5 billion of losses were hidden in books. Just a couple of months after the scandal, the capitalization of Olympus fell by 75%. What went wrong in this case?

Board Composition - Olympus Board within the period of controversial acquisitions was comprised of three non-executive directors, while all other members were executives. The Board was comprised of 13 members and until 2011, a non-Japanese was never appointed as CEO. In that way, Olympus non-executives could always be outvoted. This practice leads towards "one fold" thinking, a lack of useful insights and discussions. There is also the fact that when individuals hold both managerial and Board positions, a conflict of interests can appear. Furthermore, there was an established practice where former CEO was becoming President of the Board, while former President of the Board remained as a member of the Board and an executive director of Olympus. This is against the best corporate governance practice since actions of the new CEO can be postponed, rejected or similarly blocked just due to the influence and the presence of his predecessor.

Age - As already mentioned an ageing board might present a risk to the company since despite their professional experience they might have a lower sensitivity to their professional reputation and future employability. In Olympus all of the Board members were above 50 while the average age of Board members was 65.

Tenure - Even though the data on individual tenure of Board members is not known, the fact is that five Board members, executives, served for Olympus between 30 and 50 years. This implies strong connections and bonds with the company. It is also obvious that these individuals lost the outside and independent perspective.

Financial industry expertise – With regards to the knowledge and professional expertise of the Board only one member of the Board had financial expertise and this was a CFO of Olympus. Two of the non-executive directors had the expertise in trade as former ministers, while the third member had the industry expertise.

3   BOARD STRUCTURE TODAY
The diversity of the Boards regarding gender, background, professional experience and competencies, leads to a broader debate which prevents Boards from a narrow, group thinking. Therefore, the next logical question is - what is the trend regarding Board structure? In 2007 the average size of the Board in Europe was 13 members, but it varied significantly in different countries - from 8 members in UK to 19 members in Germany (Heindrick and Struggles, 2007).

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1999 European average		13.5
2001 European average		12.5
2003 European average		12.5
2005 European average		12.5
2007 European average		12.8
UK		8.3
Netherlands		8.6
Switzerland		9.8
Sweden		10.8
Belgium		12.9
Portugal		14.1
France		14.3
Spain		14.7
Italy		15.5
Germany		19.1
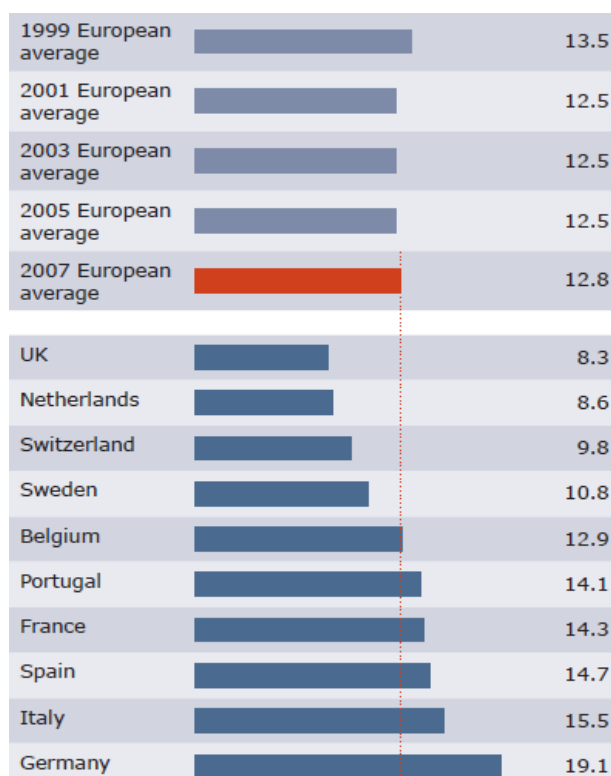
Figure 1: Numbers of directors per Board

Furthermore, in their research Heindrick and Struggles have showed that the average rate of independent directors in Boards is 54% and that it represents a significant improvement when compared with 37% in 1999. On the other hand, Grant (2007) has shown that practices regarding independent directors differ significantly between US, on one hand, and Europe and Asia, on the other hand. As shown in Table 2, percentage of independent directors on companies' boards in US is almost three times higher than in Europe and almost four times higher than in Asia. This implies that Board structures with regards to the level of independent directors are more in line with good corporate governance practices in US than in Europe and Asia.
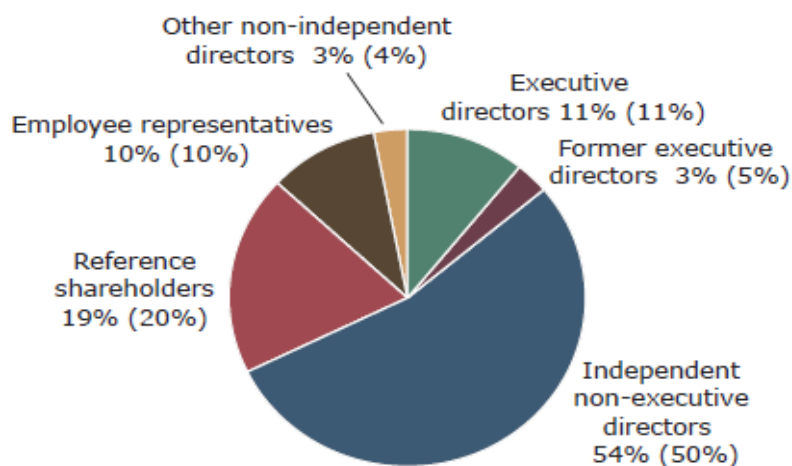
Figure 2: Board Composition by category of director

Table 1: Board Independence

S&P 500 (United States)	92%
FTSE 350 (United Kingdom)	36%
Asia	23%

The greatest level of divergence, in companies across Europe, exists in the Board composition (Heindrick and Struggles, 2009). This study showed that (i) one in four European Boards include no foreign directors despite the fact that majority of the companies have a strong international presence, (ii) that a proportion of women on Boards in the EU on average 12%, (iii) that 19% of non-executive chairmen are the former company CEOs, (iv) that the average remuneration of directors has gone up by 164% in the last ten years and (v) that a proportion of the fixed remuneration in the overall directors' remuneration is on average 83% (Heindrick and Struggles, 2009). Heidrick and Struggles (2009) have also analyzed functional diversity in European boardrooms and found that 48% of European boards have no director with a sales and marketing profile.

All the above mentioned shows practices regarding Board structure three to five years ago, but what is the situation regarding Boards structure and practices today? Around 40% of US and non-US Board members state that there is significant lack of skills and expertise or that they are insufficiently represented on their Boards (Heidrick and Struggles, 2012). Even though they agree on the abovementioned, US Board members stated that technology expertise is the most common underrepresented skill on Boards, while non-US board members named HR/talent management as the most important existing gap on Boards (Heidrick and Struggles, 2012). Heidrick and Struggles (2012) have also recognized the following trends:
-   53% of US directors and 63% of non-US directors say their boards do not provide effective training for new members;
-   50% of US directors and 46% of non-US directors report their boards do not track decisions over time to determine their effectiveness;
-   38% of US directors and 52% of non-US directors say their boards do not have an effective means to address poorly performing directors;
-   30% of both US and non-US directors said that the time allocated to discuss strategy in board meetings is not sufficient.

OECD (2011) study regarding Boards in South America has shown that Boards size is ranging between 5 and 11 members, that minimum and maximum size of the Board is regulated by law, and that in most countries there is a fixed number of independent directors. If we look at the best practices regarding the Board structure and its competencies and compare them with the results of these empirical studies, we will be able to conclude that these results are quite discouraging.

4   CONCLUSION
A global economic crisis has pointed out a several weaknesses in corporate governance practices which have contributed greatly to the failure of companies and subsequent domino effect throughout the globe. Excessive risk taking and Board structure were recognized as the primary and the most prominent ones. Furthermore, Boards packed with directors who lack necessary expertise to assess risks properly in an extremely complex and ever changing environment, connections between board members and management or controlling shareholders which led to weak scrutiny and absence of constructive challenge, formal

compliance with rules and a systematic disregard of their spirit, perverse incentives in many executive compensation contracts that reward excessive risk and do not punish failure.

Despite the fact that many researchers have proven the positive correlation between Board structure and company performance we can still observe in a majority of companies a low level of independent directors, a lack of certain skills and expertise of Board members, a low level of women on Boards, a lack of training for new Board members, a lack of mechanism for tracking decisions implementation over time, a lack of means to address poorly performing directors, not sufficient time allocated for consideration and discussion regarding company strategy and a lack of knowledge regarding risks. The lack of supervision by Boards has enabled the senior management to be short-term oriented and take the excessive amount of risks neglecting the long-term perspective of their actions. This lack of supervision and excessive risk taking has its roots in the inadequate structure of Boards. The crisis has indicated that Boards need to understand in a better way the risks associated with actions undertaken, they have to possess knowledge on how to monitor the risk management and include managing of the risk in the process of implementation of the company strategy. Therefore, one of the crucial measures should be related to the clear definition of Board responsibility related to risk management, their knowledge and understanding of risk associated functions. Furthermore, the change of the structure of Boards is crucial since independent directors can make a substantial contribution to important decisions of the company, especially in evaluating executive performance, setting executive and director remuneration, reviewing financial statements, and in resolving corporate conflicts. As mentioned already these are crucial areas which, due to poor supervision, led to the financial crisis. Very importantly, independent directors give investors additional confidence that the Board's deliberations will be free of obvious biases.

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THE IMPACT OF MERGERS AND ACQUISITIONS ON CORPORATE PERFORMANCE (THE CASE OF RUSSIAN ALUMINUM INDUSTRY)

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ABSTRACT
The paper focuses on the merger in the aluminum industry in Russia between OJSC "Russian Aluminum" (RUSAL), OJSC "Siberian-Urals Aluminum" (SUAL) and Glencore International Plc. Besides the practical issue connected with the optimization of the united resources, the overall effect of the merger has raised ambiguous concerns among both theoreticians and practitioners. Therefore, further research is needed to analyze the multifaceted impact of the merger on the corporate performance. The present research considers the theoretical pattern of the M&A influence on the corporate performance through the prism of management and financial factors including economic ratios and market multipliers. The practical implications of the development of these factors in the pre- and post-merger periods are considered. Additionally, the impact of the merger on the corporate performance is assessed through the market multipliers approach which allows evaluating and trailing the dynamics of the companies' fair value over 2006-2011. Finally, the paper provides an overview of the stock prices performance of the companies operating within the aluminum industry to demonstrate the general impact of the merger.

Keywords: Aluminum industry, Business integration, Corporate performance, Impact of M&A

1 INTRODUCTION

The Russian market of mergers and acquisitions has strengthened over the recent decade. The grounds for such a surge in the number of deals vary from liberalization of Russian regulations ending with the political shifts. However, the most considerable reason lies in the balanced economic development which propelled the companies to seek for the global expansion through consolidation and innovative decisions.

The result of these activities has been the ongoing creation of large companies becoming major players in the industry on the national and global levels. Even though the success of M&A transaction is obvious at first glance, the analysts should consider different issues concerning the deal effectiveness. Moreover, accumulating the experience of each deal can contribute to invigorate the M&A activity within Russian legal and economic contexts.

One of the most significant consolidations on the Russian market was the merger of Russian aluminum giants, i.e. RUSAL and SUAL, and Swiss company Glencore which was supposed to create an international diversified metallurgy corporation. In light of the recent announcement, the analysts predicted the success of the deal and, in turn, the world aluminum market shake-up (Bank of Moscow, 2011). So, it can be assumed that this deal represents particular value in terms of its useful experience for M&A process development.

This paper covers main findings of the research devoted to causes and effects of the particular deal and its reflection on the conceptual integration development.

2 RUSSIAN ALUMINUM MARKET AND INTEGRATION STRATEGY DEVELOPMENT: RESEARCH SCOPE AND OBJECTIVES

The importance of appropriate research is defined by the multifaceted impact of merger on corporate performance. The main question is connected with the influence of RUSAL, SUAL and aluminum assets of Glencore International Plc. merger on the corporate performance of the United Company RUSAL over 2007–2011. To achieve this purpose, the main goals are described as follows:

- to establish the theoretical framework of the influence of M&A activity on the corporate performance;
- to compare the pre- (2006) and post-merger (2007–2011) financial indicators of the corporate performance of the considered companies;
- to trail the trend in the fair value of the considered companies, evaluated through market multipliers approach;
- to assess the impact of the merger of the considered companies on the stock price performance of the companies-rivals within the aluminum industry.

Moreover, there is the attempt to lay down a general pattern of integration strategy realization.

2.1 Research contents and methodology

The initial research issue concerns the definition of corporate performance in terms of M&A deals. Then, to reinforce the results, the research includes an overview of the aluminum industry identifying the pre- and post-merger company position.

Methodologically, the research is based on the literature review, economic and financial analysis of the companies in question, and comparison of the pre- and post-merger company's performance on three levels. First, the financial ratios of the OJSC RUSAL and UC RUSAL are evaluated. Second, the fair value of the company based on market multiplies is assessed. Besides, the market multipliers performance is trailed within the company perspective and aluminum industry. Finally, there is the estimation of the impact of merger on the stock performance of the companies-rivals of OJSC RUSAL and UC RUSAL within aluminum industry. As the last stage of the overall analysis, the discussion of the main findings of the deal impact on corporate performance along with limitations is provided.

2.2 Approaches to the evaluation of merger impact on corporate performance

Integration strategy based on M&A processes is a question of great importance to modern business units (Dunaway, 2008; Gaughan, 2010). Making a decision about such deals, companies conduct multiple-factor forecasting of organizational and financial results of joint entrepreneurship activity. Obviously, there should be the assessment potential (Coskun, 2008; Rennebood, 2006). In order to evaluate the impact of the merger on corporate performance in the most efficient way, the first issue concerns the establishment of theoretical and practical pattern of the research subject.

The literature review reveals the most rational approach to assess the corporate performance in the context of merger influence on it (Ismail, 2011, pp. 89–104). Despite the argumentativeness of the organizational paradigm of the corporate performance, the lack of consensus among the scholars relating to the measurement issues entails the necessity to adopt the financial toolkits to conduct a sound and consistent analysis. So, the first conclusion is that the consideration of corporate performance will be based on the financial perspective.

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The next issue is the choice of the appropriate financial metrics. Generally, the financial indicators break down into two groups: accounting- and market-based ratios. The dynamics of the these indicators is trailed as well. In addition, the comparative analysis with the industry averages (as being benchmarks of the industry performance over the considered periods) would solidify the analysis. It is essential to highlight that the consideration of PE (price to earnings) and EV/EBITDA (enterprice value to earnings before interest, tax and depreciation payments) ratios allow to assess the fair value of the companies in the prior and post to merger periods, since mix of these indicators is considered to be the optimal indicators of company value (Bryan, 2007).

The final analytical technique implies the event studies. Observation of the stock prices behavior over the merger period and over the medium term period is discussed to provide more sound analysis, since the abnormal results revealed would indicate an influence which needs to be scrutinized.

On balance, it is suggested that these types of analyses would provide an overall picture of the merger impact on the corporate performance. Moreover, the data on the market share amplification, shareholders' structure changes, and additional relevant information would reveal the outcomes of the merger in terms of possible integration effects.

3 PARTICIPANTS OF A DEAL WITHIN THE ALUMINUM INDUSTRY IN 2006-2011

To identify correctly the post-merger company position it is essential to determine the key issues relating to the aluminum industry in the prior to merger period.

3.1 Aluminum industry in the pre-merger period

The aluminum market is one of the largest markets among commodities in the world (Somer, 2006). Being second-ranked (after copper market) in terms of trading volume of metals, the aluminum market is considered to be one of the most prosperous in the past decade. In 2003-2006 demand over the period has constantly exceeded the supply, although both indices have experienced substantial growth approximately by 20% each. This leads us to the considerable feature of the industry – the supply is not catching up the rapid demand growth (Aluminum Industry, 2012).

The next feature of the aluminum industry is the geographical distribution of production. The global growth of production was driven by the emerging economies, e.g. China, India, South Africa, and Brazil, whereas the developed economies, e.g. the US and Norway, reduced the production level in the considered period. However, the leaders of the industry are represented by the following countries: China, Russia, the US, and Canada (International Minerals Statistics and Information, 2011).

The consumption growth is demonstrated by the developing countries over the considered period. The analysts predict the increase in demand in the following decades, mostly due to accelerating urbanization and industrialization in China. So, here is the third feature of the aluminum industry – the consumption epicenter is moving from the developed countries towards developing (Chen, 2003; International Minerals Statistics and Information, 2011).

Finally, one of the most significant features of the aluminum industry is the high level of concentration that is approximately estimated as 95%

(http://www.reuters.com/article/2007/03/27/aluminium-russia-merger-idUSL2713534620070327, 2012). In 2006, the world aluminum industry was mainly represented by Alcan Inc. (Canada), RusAl (Russia), Alcoa Inc. (US), Hydro Aluminium (Norway), Chalco (PRC), Hindalco Industries Ltd. (India). New entering into the industry is inherent with the substantial barriers as capital expenditures and time required to build the aluminum smelters and alumina refineries.

One more factor refers to the aluminum price fluctuation. Analysts comment, that the decline in prices is generated due to the combination of demand decrease and supply expansion in the further five years (Aluminum industry, 2012). At the same time, experts mention that the world power sector continues to generate strong demand for aluminium, so better buying can be expected soon from the construction and transport sectors (Bose, 2012).

All in all, the world aluminum market appears to be promising in terms of prospective advantages to the companies operating in this domain, in spite of the factors (e.g. global crises, fluctuations of commodities prices, export reduction) that could influence negatively the situation on the world market.

Against this background, the merger of key aluminum players such as OJSC RUSAL and OJSC SUAL, and aluminum assets of Glencore International Plc. have transformed the aluminum industry both locally and globally. The deal announced in the end of 2006 and completed on March 2007 was aimed at the strengthening of competitive position of the united company. The analysts predicted the positive outlook for the united company with the aggregate value of RUSAL and SUAL companies standing at $17-18 million. Additionally, the management of the company assessed the coming cash flows of approximately $3 billion during the next five years (Bank of Moscow, 2011). In this way, the parties engaged in the merger recognized the benefits of the deal in case of successful implementation.

3.2   Open joint stock company RUSAL

OJSC RUSAL (RUSAL) is the third largest aluminum producer (accounts for 10% of global output) and first-ranked in Russia (accounts for 75% of local output). RUSAL conducts its operations in 9 regions in Russia and 13 countries, and exports its products to approximately 50 countries worldwide. RUSAL company was established in March 2000 through the aluminum consolidation of Sibirskiy Aluminum and Millhouse Capital. The OJSC RUSAL is incorporated in Jersey (UK) in 2005 with the headquarters in Moscow. Since 2006 the En+ Group Limited holds the controlling interest in UC RUSAL (47,71%). In turn, the En+ Group Limited is established to control the mining, metals and energy companies which fall under the financial industrial group "Basic Element". The key information on the corporate performance over 2006 is presented as a table 1.

In the research the financial position of the company was considered using the ratio analysis. Excepting simple computations of the coefficients for RUSAL Company itself, the additional information of the companies operating within the industry was also used. The analysis was fraught with a reliability issue since the information was gathered from the published sources and official annual reports for particular companies (Bank of Moscow, 2011; RUSAL is the world's largest aluminium producer, 2012). To sum up, the main findings concerning the company's ratio analysis the following facts should be outlined.

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The liquidity ratios of OJSC RUSAL were below the theoretical benchmark which indicates a poor liquidity position. It implies that the company's assets are not sufficient to cover its liabilities as they come due. However, the comparative analysis with the companies in the aluminum industry denoted that the RUSAL is featured with an adequate liquid position or even more stable than other rivals, except for the quick liquidity ratio (http://www.rusal.ru/en/about/, 2012).

Table 1: Financial highlights on OJSC RUSAL, 2006 (http://www.rusal.ru/)

Indicator	$, million
Income Statement	2006
Sales	8429
Gross Profit	4243
EBIT	2954
EBITDA	3317
Profit before taxation	2860
Net profit for the year	2524

The capital structure ratios demonstrated that the company employed considerable external financing. However, the company's ratios were just over the general benchmark that implies a financial stability in 2006. In comparison with rivals of developed (Alcoa, Norsk) and developing (Hindalco) economies, the ratio of RUSAL exceeded the counterparts of pure leverage ratio which indicates lower financial stability, whereas for net debt-to equity ratio RUSAL bears approximate the identical financial burden. Meanwhile, the two remaining companies experienced significant impediments with the debt standing at more than five times than equity (Aluminum Industry, 2012).

In terms of profitability, the RUSAL displayed remarkably high indicators in overall aspects over 2006 year. The return on assets exceeded all the counterparts within the aluminum industry that could be particularly explained by the low cost position of RUSAL (high value of profit margin) which amplifies the operating and net profits of the company. The assets turnover indicator of the RUSAL highlighted the rational use of its assets. The company outperformed almost all the rivals in the aluminum industry, whereas in case of cash conversion period the company position is quite tense. However, comparing to companies-rivals, the conversion period is extremely long, and this suggested that the company needs to improve the current pace of operation (http://www.rusal.ru/en/about/).

To sum up the key characteristic relating to the performance of the RUSAL a SWOT analysis was conducted. In brief, such strengths as geographical diversification, advantages of vertical integration, favorable tax regime were discovered; high debt burden, location of bauxite factories in politically instable areas, disability to pay dividends in future years were noticed among weaknesses. New integration projects, aluminum price and increase of efficiency are mentioned as the main opportunities. Threats are connected with price increase on commodities (e.g. electricity), change in tax legislation, violations of debt covenants and fluctuations in currency exchange rates.

As the major problem the RUSAL Company could face during its operating activity the lack of resource self-sufficiency was defined.

3.3   Deal terms and expected benefits

The deal was firstly announced on the 9th October, 2006 (RUSAL, SUAL, Glencore complete aluminium merger, 2007). The bargainers signed an agreement to merge the aluminum assets of the companies under a newly created subsidiary of EN+ Group Limited, the United Company RUSAL. The merger assumed the ownership structure change in way presented as a chart 1.
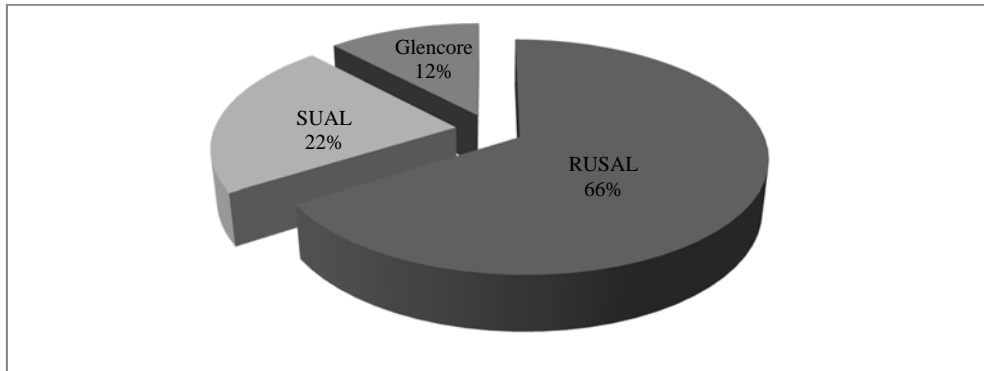
Chart 1: Shareholding structure of UC RUSAL, 2007(RUSAL is the world's largest aluminium producer, 2012)

The Open Joint Stock Company "Siberian-Urals Aluminum Company" (SUAL) established in 2006 was the sixth-largest company globally and the second-ranked in Russia (25% of market share). The controlling interest of SUAL was held by SUAL Partners Limited, incorporated in Bahamas. The SUAL group was also structured as a vertically integrated company, comprising 20 production facilities that are located in 9 regions of the Russian Federation and Ukraine. The primary activity of SUAL is the production of aluminum and alumina, foil, aluminum alloys, silicon. The major advantage of the SUAL was the available resources and, in turn, the resource self-sufficiency (Aluminum industry, 2012).

Glencore International AG (Glencore) is Swiss-based leading commodities trader controlled by Amokenga Holdings Ltd (Bermuda). The company operates in such segments as metals and minerals, energy, agricultural products. The main value of Glencore is solid relationship with more than 8000 of clients and suppliers that span the automotive, steel, power generation, oil and food processing industries. Glencore aluminum division would become a merged part with RUSAL and SUAL's aluminum assets portfolio in exchange for a 12% stake in the merger company (Aluminum industry, 2012).

In this way, the merger would have contributed to the achievement of two main purposes of the OJSC RUSAL – the resource self-sufficiency issue and wide access to the international markets.

4   PERFORMANCE OF THE UNITED COMPANY RUSAL

As mentioned above, the first changes the merger has involved concern the shareholding structure. Then the company pursued other M&A transactions which brought new shareholders in the UC RUSAL. For instance, the acquisition of over 25% of MMC Norilsk Nikel shares has changed the shareholding structure in 2008. After that, in 2010, the UC RUSAL has undertaken IPO process on Hong Kong Stock Exchange that was reflected in the shareholding structure as well (chart 2).
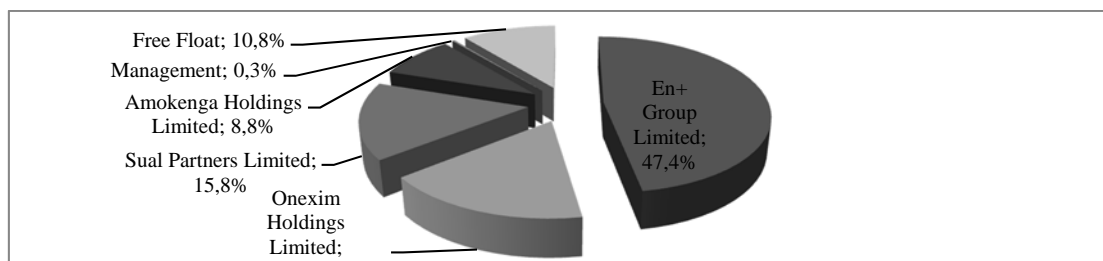
Chart 2: Shareholding structure of UC RUSAL, 2010 (RUSAL is the world's largest aluminium producer, 2012)

The deal makes the UC RUSAL the largest producer of aluminum and alumina in the world and the unique producer of aluminum in the Russian market. Moreover, in the long term perspective the UC RUSAL holds its position of the leader in the aluminum industry.

The key financial indicators over 2007–2011 years show that in the recent years the UC RUSAL has managed to improve its financial position.

Table 2: Financial information on UK RUSAL, 2007-2011 (http://www.rusal.ru/)

Income statement ($, milion)	2007	2008	2009	2010	2011
Revenue	13588	15685	8165	10979	12291
Gross Profit	5232	4612	1455	3484	3505
EBIT / operating activities	3647	-1228	-63	2031	1749
EBITDA	4523	-198	523	2529	2267
Profit before taxation	3225	-6053	839	3011	610
Net profit for the year	2806	-5984	821	2867	237

The data shows that the leverage ratios experienced unfavorable fluctuations with an increased fraction of current and non-current liabilities. After these years, the company has reverted to the sound performance with bettering of capital structure ratios in 2010–2011. It is essential that over the mentioned period, the UC RUSAL ratios of capital structure have not generally outperformed the counterparts of rivals.

Regarding profitability ratios, it should be mentioned that the UC RUSAL has permanently outperformed its rivals (excluding the result of 2008) through gaining lucrative margins despite the difficulty in product differentiation in the materials industry. Another reason is related to the low cost position of the UC RUSAL.

Finally, the cash conversion cycle was optimized due to the impediments of inventories' conversion period.

5   EVALUATING THE IMPACT OF THE MERGER ON PERFORMANCE OF UC RUSAL

According to the methodological basis of the research of this paper, to estimate the influence of the integration deal on the business indicators of UC RUSAL the following approach has

been used: financial statement analysis; prospective comparison of management and financial factors of the OJSC RUSAL and the UC RUSAL including economic ratios and market multipliers; event study of the stock prices of UC RUSAL's competitors.

The main results of the merger are briefly outlined below. Of course, the situation was influenced by the events which have occurred over the considered period and affected the corporate performance: global financial crisis of 2008–2012; price escalation for electricity and other resources employed in the aluminum production over 2008–2011; price surge for aluminum in 2009; IPO in 2010; shares repurchase in 2011. To receive the relevant outcomes that provide the proper business picture the analysis was conducted on the basis of the most representative data that is computations on the fair value of the company in the pre- and post-merger period which are provided in the table 3.

Table 3: Valuation of OJSC RUSAL & UC RUSAL, 2006–2011 (http://www.rusal.ru/)

	2006	2007	2008[1]	2009	2010	2011
P/E	12,14	11,93	14,81	29,40	15,44	6,02
EV/EBITDA	6,14	7,69	6,86	15,11	7,59	10,56
Net profit for the year	2524	2806		821	2867	237
EBITDA	3317	4523	3544	591	2529	2267
Capitalization	*30650*	*33476*		*24137*	*44261*	*1427*
Debt	*4297*	*8185*		*12586*	*12101*	*12350*
Cash & Cash Equivalents	*241*	*261*		*236*	*491*	*646*
Enterprise Value (P/E)	34706	41400		36487	55871	13131
Enterprise Value (EV/EBITDA)	20353	34767	24312	8932	19190	23946
Fair Value	27529	38083	24312	22710	37530	18539

The positive outlook of corporate performance is confirmed by the fair value of the united company that exceeds the value of the company prior to the merger. Obviously, the crisis of 2008-2009 years deteriorated economic results. But then the company increased value, so the corporate performance was improved as well. This proposition is justified by the growth of EBITDA and Net Profit of the UC RUSAL in 2010. However, despite the stable operational performance of the UC RUSAL in 2011, the increase of operating expenses along with the other factors, influenced destructively the net profit resulting in low fair value of the UC RUSAL.

The performance of the company has experienced the ambiguous changes over 2006-2011. Whereas, in terms of market multipliers, the merger has not implied the improvement, the fair value of the company evaluated on the basis of industry averages outperformed the counterparts (Alcoa, Alcan) (Aluminum Industry, 2012).

Thereby, the indicators of company's performance reflect both positive and negative results of a deal for the current and future development. However, obvious achievements should be depicted.

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[1] The market capitalization of UC RUSAL based on the multipliers is not estimated since the company reported negative net profit

Generalizing the financial of UC RUSAL as a result of merger the following points can be specified:

- positive outlook for the financial highlights, i.e. sales, net profit volumes;
- leading position in terms of cost-effectiveness among aluminum companies;
- stable liquidity position over long term;
- increased financial independence;
- deterioration of profitability;
- acceleration of turnover processes in both the short and long term.

Regarding such market indicators as a market niche and competitiveness it can be concluded that the deal has not led to the substantial shift of market shares within the aluminum industry since even before the integration OJSC RUSAL, SUAL group and Glencore International Plc. were the leading companies. Additionally, no significant impact of merger on rivals was trailed for a while.

However the purpose of the deal – the consolidation of assets and customers in order to create a globally largest producer and supplier of the aluminum – is achieved. The corporate performance of UC RUSAL has been demonstrating positive development during the-post merger period, and the following progress can be predicted.

6   CONCLUSION

The recognition of the Russian companies on the global markets entails the necessity to sustain their operational and financial soundness. Predominantly, within the mature industries with limited product differentiation options, the processes of development and extension are highly associated with the M&A activity, since it is considered as the last resort to achieve the long term solid performance. One of the pivotal deals following these changes was the merger of the OJSC RUSAL, SUAL group and Glencore International Plc. in 2007. Two Russian aluminum giants and a Swiss commodities trader have consolidated their aluminum assets in order to overcome their internal issues and to occupy the leading position within the aluminum industry. The transaction has quickened vital interest among the analysts since the date of the first announcement, and still delivers the value to the practitioners to assess the multi-faceted impact on the corporate performance of the merged company.

The general conclusion implies that the merged company UC RUSAL has outperformed the OJSC RUSAL. The stabilization of essential indicators (liquidity, capital structure, and turnover ratios) proves the positive integration results, even if the profitability of the company was deteriorated. The global financial crisis started since 2008 along with the share repurchase in 2011 resulted in the decrease of the net profits gained by the company over the considered period. Nevertheless, the favorable trends in overall financial indicators, fair value and market multipliers of the UC RUSAL for the last period predict positive outlook for the merged company. In this way, the merger appears to solidify the financial and market position of the company.

Focusing on the main issues of the research, this paper covers the most significant factor of a particular transaction in order to lay down basics of integration strategy and management decision making. In this connection the theme provides wide opportunities for research devoted to the potential of integration instruments in entrepreneurship context. Regarding the findings the following issues are considered: expansion and diversification of business operations; production of the aluminum-related goods; emission of bonds that can reduce the

debt burden of the company and optimize its capital structure; increasing the part of intangible, knowledge-oriented assets; new management approaches related to a modern, consistent with the current situation cost-effective program allowing the united company to stay afloat.

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Enterprise in Turbulent Environment

FORMATION OF THE ACCOUNTING AND TAX POLICIES IN LOMBARDS

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ABSTRACT

Organizations pawnshop unit of financial investments is a loan granted to one person, confirmed by collateral and collateral ticket. In accounting, the value of investments are recognized at cost on the account "Short-term loans receivable" in the amount of outstanding loans to the individual. Off-balance account "Securing obligations and payments." Investments in accounting are recognized in the amount of outstanding loans, and the mortgaged property - on the appraised value. During the disposal of investments - of redemption, or the implementation of unclaimed deposits - are written off in the amount of outstanding loans. On loans granted market value is not defined. Therefore, investments in pawnshops to be reflected in the accounting records and the financial statements of the reporting date at cost, ie the size of outstanding loans. Provision for impairment of investments is not created because the sustainable track significant reduction of loans impossible. The order for the accounting policy should contain a list of forms required for the current activity, based on this, the order of the accounting policies Lombard organizations must have contained the following primary documents and registers: a pledge card; acceptance report on unclaimed pledges of material responsible people at the auction, in which the mortgaged property is reflected in the two estimates - mortgaged property on the estimated value and the size of outstanding loans, the protocol of the results of trading, which covers information on each ticket as collateral in the two assessments and provides information about the buyer of the pledged property; inventory inventory of the mortgaged property - the value of collateral is reflected in the two estimates - on the assessed value and the size of outstanding loans, reports the daily commodity researchers-tellers, a statement of accounting mortgage tickets. Economically feasible in accounting policies pawnshops provide for separate accounting, taxable and non-taxable value added tax. The major share of income are interest on pawn loan and interest on the loan for the second month. According to the Tax Code of remuneration received from money loan are exempt from value added tax. In implementing the pledges were not redeemed at a public auction, the pawnshop shall withdraw financial results for each lot.

Keywords: Accounting policies, Lombard, Optimal accounting policy

1 INTRODUCTION

In the past decade in Kazakhstan is actively formed the services market. A special place in the market occupied by lombard organizations that provide specific types of financial services.

In modern conditions lombard industry attracts the attention of entrepreneurs due to the increased demand for services and pawn shops rather high yield of this sphere of business. Interest in this kind of activity on the part of the state due to their socio-economic significance, which is manifested in the fact that, as a source of short-term lending to citizens, lombards meet the respective needs of various segments of the population. As a result, to some extent reduced social tension in society and increases the effective demand for goods and services.

Lombards - new links to the financial services market and are of great interest for the development of this business as a network and provision of quality financial services.

As the demand for cash there and will exist, because people and businesses cannot live a normal life and function without financial support. In these circumstances, the activities of lombard organizations are popular, as people are willing to provide financial loans.

Lombards are the most popular credit and financial organizations with clients - middle class, having a regular job, but low wages or lost jobs. The needs of these people are usually ahead of the possibilities.

In world practice, by the end of the twentieth century, along with the development of accounting, based on information technology has developed four interrelated and complementary form of control over the activities of credit institutions: prudential supervision, external audit, internal control and internal audit. Unfortunately, the level of scientific understanding and practical use of the completeness of each of these types of controls and features of the financial and managerial accounting and analysis are far from uneven. For example, a lack of clarity in defining the essence of accounting and reporting differences in types of audit and control systems in the management of collateral organizations often leads to the fact that they are sometimes seen as substitutes (substitutes for each other). This occurs because the nature of the questions, place and role of accounting, auditing and analysis in the management of collateral organizations until recently have not been systematically and comprehensively explored in the scientific aspect. Thus, accounting, auditing and analysis continue to be undervalued management tools. In such a situation is difficult to expect a certain performance of lombard organizations.

2 ACCOUNTING POLICIES PAWN IN THE REGULATORY ACCOUNTING

In the system of regulatory accounting, the accounting policy of the organization is treated as a separate set of their chosen methods of accounting. The list identifies the primary monitor, cost measurement, the current group and the final compilation of economic activity.

Generates accounting policy chief accountant of the organization. However, he believes that we comply with the assumptions and requirements set forth in the regulatory accounting, basic principles of his constituents. The content of the accounting policies should include methodological, technical and organizational aspects.

Organizational aspects of accounting policies is a form of organization of financial management services.

Methodological aspect reveals the nature of individual objects of accounting, based on the current regulatory framework. Methods of accounting, which have a significant impact on the assessment and management decisions of users of financial statements should also be reflected in the accounting policies of the organization.

The technical aspect of the accounting policy provides tools implementing methodological aspects. It includes the development and approval:
a. The working chart of accounts based on a model chart of accounts;
b. Forms of primary documents in those cases when the administration of certain business transactions not covered by their standard forms;

c. Forms of documents for internal financial reporting;
d. A form of accounting;
e. About the inventory;
f. Methods of evaluation of certain types of assets and liabilities;
g. Rules and workflow processing technology of accounting information;
h. The duration of the first reporting year, if the organization has acquired legal personality after October 1.

The work plan is funded from the list of accounts, the need for which is established for each facility records. It includes accounts of varying degrees of detail and generalization within the current accounts of the Model Plan, approved by the Ministry of Finance of the Republic of Kazakhstan May 23, 2007.

The choice of accounting policies depends largely financial - economic stability of the organization.

The main normative documents regulating the principles of the formation and disclosure of accounting policy for accounting purposes, is a NOFA 2, approved by order of the Minister of Finance of the Republic of Kazakhstan (2007). This Standard is part of a system of regulatory accounting in the ROK, and shall be applied subject to other regulations on accounting. Procedure for making an accounting policy is also regulated by the Law of the Republic of Kazakhstan dated February 28, 2007 "On accounting and financial reporting."

In the development and approval of accounting policies Lombard organization has two main objectives: consolidation of selected methods of accounting, regulation (at the level of internal regulation), the maximum possible number of elements of accounting, including the organization of documents, organization of the accounting department, the organization of interaction with the accounting department other units and with the governing bodies and staff.

Existing regulations on accounting organization represented several ways of accounting for certain areas. Organization, based on the characteristics of economic activity, choose for yourself one of several ways to account for changes in the economic processes under the current legislation and regulations. If the regulations do not provide a method of accounting for the specific issue of its economic activity, it develops its own and reflects in its accounting policy.

3   CONTENT OF THE ORGANIZATION'S ACCOUNTING POLICIES LOMBARD
The accounting policies Lombard organization should include:
a. A working chart of accounts (with a synthetic and analytical accounts that the organization will use in their work);
b. Forms of primary documents used by the organization;
c. Procedure for making an inventory of assets and liabilities of the organization;
d. Methods of valuation of assets and liabilities;
e. Rules of documents;
f. Procedure for monitoring business transactions, etc.

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Accounting policy for tax purposes - is required to organize the rules under which taxpayers summarize information about their business operations during the reporting (tax) period to determine the tax base.

It should be noted, certain accounting policies used tool for tax planning and can within certain limits, to adjust the tax payments. The accounting policies gives the taxpayer an opportunity to systematize and consolidate in one document the methods and means which he deems it necessary to apply when calculating taxes.

Procedure for approval and the application of certain accounting policy for tax purposes is set in Chapter 7 of the Tax Code of RK (On taxes and other obligatory payments to the budget, 2008).

Accounting policy is accompanied by its activities since its inception and until the liquidation and changes only in exceptional cases. In the Tax Code of RK are two things that change and (or) amendments of the tax accounting policies:

1) approval of a new tax or accounting policies of the new accounting policy section, developed in accordance with International Financial Reporting Standards and the requirements of the legislation of the Republic of Kazakhstan on accounting and financial reporting;

2) changes and (or) additions to the existing tax or accounting policies section of the current accounting policy, developed in accordance with International Financial Reporting Standards and the requirements of the legislation of the Republic of Kazakhstan on accounting and financial reporting (On taxes and other obligatory payments to the budget, 2008; Article 60, paragraph 5).

Because the loans to the lombard to individuals, organizations are financial investments. Given the requirement of materiality in reporting Lombard organization shall be disclosed the following information:

− Ways to evaluate investments in their decision to embrace and disposal;

− The consequences of changes in methods of evaluation of financial investments in their retirement;

− The value of financial investments for which the current market value is not determined;

− The amount of reserves established for impairment of investments, indicating: the type of investments, the amount of provision created in the year, the amount of provision, recognized operating income of the reporting period, the amount of reserves used during the year.

Organizations lombard unit of financial investment is a loan granted to one person, confirmed the agreement of pledge and the pledge card.

In accounting, the value of financial investments are carried at historical cost in the account in 1110, "Short-term loans granted" in the amount of loans granted to an individual. In the off-balance sheet account "Provisions for liabilities and payments received."

Investments in accounting are recognized in the amount of loans granted, and the mortgaged property - on the appraised value.

During the disposal of investments - Redemption of mortgaged property, or the implementation of unclaimed deposits - are written off in the amount of loans issued.

For loans issued by the current market value is not defined. Therefore, investments in lombards be reflected in the accounting records and financial statements of the reporting date at cost, ie the size of loans issued.

Provision for impairment of investments is not created because a significant reduction in steady track of loans impossible.

According to the Law of RK № 234 - III «On Accounting and Financial Reporting," all business transactions conducted by the organization, supporting documents must be filed. These documents serve as the primary accounting documents, which is based on accounting.

Primary records are accepted for registration, if it is in the form contained in the release of standardized forms of primary records and documents in a form which is not provided in these albums should contain the following mandatory details:
a) The name of the document;
b) The date of the document;
c) The name of the organization on whose behalf the document is drawn up;
d) The maintenance of business operations;
d) Meters business operations in the physical and monetary terms;
e) The name of the persons responsible for committing operation and accuracy of its registration;
g) The personal signature of such persons.

Lombard organizations perform a specific activity, lending to individuals, so many business transactions, provided the main activity, there are no standardized forms.

Order of the accounting policy must contain a list of forms required for current operations, based on this in the order of the accounting policies Lombard organizations must have contained the following primary documents and records:
− A pledge card;
− The act of reception and transmission of unclaimed collateral material from the responsible persons at the auction in which the mortgaged property is reflected in the two estimates - the mortgaged property at the appraised value and the size of loans granted;
− The protocol of the results of trading, which covers information on each ticket as collateral in the two assessments and provides information about the buyer of mortgaged property;
− Inventory list of mortgaged property - the value of collateral is reflected in the two estimates - on the appraised value and the size of loans granted;
− Records of the commodity researchers, cashiers daily;
− Statement of accounting mortgage notes.

In the accounting policy for tax purposes lombard organization reflects the order of tax accounting in accordance with the rules defined by Chapter 7 of the Tax Code. Annexes to the accounting policy for tax purposes shall form tax accounting registers and the procedure to incorporate the analytical data of tax accounting, data source documents developed by the

lombard - the taxpayer itself. Tax and other authorities may not install the required forms to taxpayers, tax accounting documents.

To date, the legislation does not clearly defined composition and structure of the accounting policy for taxation purposes.

To avoid duplication of regulations, rules, regulations, techniques, methods used in accounting and taxation, in the preparation of the accounting policy for accounting and tax accounting, it should be allocated in two separate sections: the first - according to the rules of accounting, the second - on the tax accounting rules.

In the accounting policy for tax purposes should reflect the organization of Lombard method for determining the values that form the tax base (the methodological techniques and methods of tax accounting), and the general procedure of tax accounting (organizational - technical methods of tax accounting). At the same time applications to accounting policy for tax purposes shall be approved analytical form of tax accounting registers, which the lombard - the taxpayer is developing its own. In NK RK contains a direct reference to the need to reflect the accounting policy for tax purposes, the taxpayer applied methodological techniques and methods of tax accounting (the order of recognition of revenues and expenditures, special rates, limits and other expenses) as a required element of policy.

In the NC of RK also provides methods, rules and methods, which are bound by the reflection in the accounting policy for tax purposes is not installed. The taxpayer may identify those provisions of their own, which he will include in its accounting policy for tax purposes, along with elements of accounting policies (On taxes and other obligatory payments to the budget, 2008) Chapter 7.

In the accounting policies of organizations need to identify the lombard and consolidate the concept of "income." Income in the lombard organizations are remuneration (interest), accrued on the principal activities: interest on the loan, interest on loan for the second month, pay for storage.

In the formation of accounting policy in organizations lombard for value-added tax should be in accordance with Article 231 of the Tax Code to indicate the time of determining the tax base for the implementation of services for mortgage transactions.

Organization of the lombard, established in the accounting policy for tax purposes, the time the tax base upon receipt of funds - the day of payment for services - will be forced to maintain separate accounting and tax accounting.

Economically feasible in the accounting policy of lombards to provide for separate accounting of transactions taxable and not subject to VAT. The major share of income lombard interest on the loan amount and interest on the loan for the second month. According to the Tax Code of RK remuneration received money under the contract of loan shall be exempt from value added tax.

If implementation is not redeemed liens at public auction, the lombard shall be obliged to show financial results for each lot, as under the Civil Code, the amount exceeding the debt to the lombard must be returned to the client or, if the amount received for sale of the pledged

property is insufficient to fully meet the requirements of Lombard to the mortgagor, then the pawn receivable arises, unreal to recovery, which is taken into account when calculating the tax base for income tax.

4 CONCLUSION

In conclusion, the formation of the optimal accounting policy in Lombard organizations to manage financial resources of the lombard, to influence the formation of tax liabilities to the budget of the organization and affect the procedure for calculating taxes.

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KAIZEN AS A BASIS FOR QUALITY SYSTEM PERFORMANCE IN ORGANISATION

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ABSTRACT
Due to high dynamics of change in modern socio-economical environment, companies have to generate new methods of responsiveness to arising challenges. One of the ways to gain sufficient competitive advantage is quality orientation. Although Kaizen is deemed to be one of the core elements of quality improvements, its modern impact is being underestimated. Four basic components of the philosophy - essence, innovation, personal and quality control allows to frame an integrated quality system which will lead to performance improvement. Arising discussion is formulated as following - how to implement these four elements into organizational structure. The central contribution and novelty of this paper is a contemporary integrated approach on improvement internal organizational processes on the basis of Kaizen. The study uncovers several conceptual blocks: theoretical basis of Kaizen philosophy, comparative analysis of methods to implement Kaizen in organization; development of method to implement Kaizen concept, evaluation of «Kaizen effect». The research adopted case study method, collecting data from various sources - documentation investigation, structured questionnaire and interviews - in order to ensure its representativity. The paper would be useful not only for scientists discovering modern Kaizen impact, but also for experts willing to implement kaizen philosophy on practice.

Keywords: *Continuous improvement, Kaizen, Performance of organization, Quality, Quality-oriented strategy*

1   INTRODUCTION

In late 70's American companies faced fierce competition emerged due to the change of essence of the market - corporation «Ford» lost more that 3 billion dollar in 3 year period; «Chrysler» had to borrow money from the US government to evade bankruptcy; «Xerox» lost half of their markets (Imai, 2005). After some time it became obvious that competitive advantages of the new market leaders lie in the sphere of new kind of management. Core characteristics of the new approach became involvement, quality, statistical control of processes and others - Kaizen.

Despite the fact that Kaizen concept has not been developing for a long time, elaboration of Kaizen ideas gained especial actuality in the context of global economic crisis and understanding that not always new methods of management allow to attain maximum results.

A growing interest to the concept has been noticed nowadays - fundamental ideas and mechanisms of Kaizen concept are being used as a basis for quality standards development (for instance ISO 9000, ISO 10000 (http://protect.gost.ru/document.aspx?control=7&baseC=6&page=2&month=3&yaer=2009&

search=&id=174286), ISO 21500:2012). Moreover, Northern Europe commitment to ideas of continuous improvement should be marked - for example, «Volvo» company is one of the word leaders in the sphere of Kaizen ideas appliance.

Although Kaizen concept has strong theoretical framework, the concept has not explicit guidance on how to adapt it on practice. Due to this fact the aim of the papers was formulated as following:

Aim of the work is projecting of a complex approach to internal processes (involved in organizational quality management system) improvement on a basis of Kaizen concept.

A related series of targets was formulated in concordance with the set aim:
- Reviewing of Kaizen concept theoretical basis, accentuation of its fundamentals;
- Comparative analysis of Kaizen concepts implementation approaches into organization;
- Development of an algorithm of activities to Kaizen concept implementation into a particular organization;

The central contribution and novelty of this paper is a contemporary integrated approach on improvement internal organizational processes on the basis of Kaizen. The study uncovers several conceptual blocks: theoretical basis of Kaizen philosophy, comparative analysis of methods to implement Kaizen in organization; development of method to implement Kaizen concept, evaluation of «Kaizen effect». The research adopted case study method, collecting data from various sources - documentation investigation, structured questionnaire and interviews - in order to ensure its representativity. The paper would be useful not only for scientists discovering modern Kaizen impact, but also for experts willing to implement kaizen philosophy on practice.

2 REVIEW OF THE LITERATURE AND THEORETICAL FRAMEWORK

Since 1986 management as a science has been undergoing sufficient changes. A legendary book, which has changed the vision of managers on how to run their business was published that year. A book written by Masaaki Imai «Kaizen: the key to Japan's competitive success» became a foundation for further development of a new managerial concept based on continuous improvement and quality orientation.

2.1 Basic elements of continuous improvement concept

Analyzing theoretical basis of the considered theory it is possible to assume that Kaizen concept as a «system of systems» could be presented as an interrelation of elements. Structural relation between core elements of such a system is presented on figure 1.

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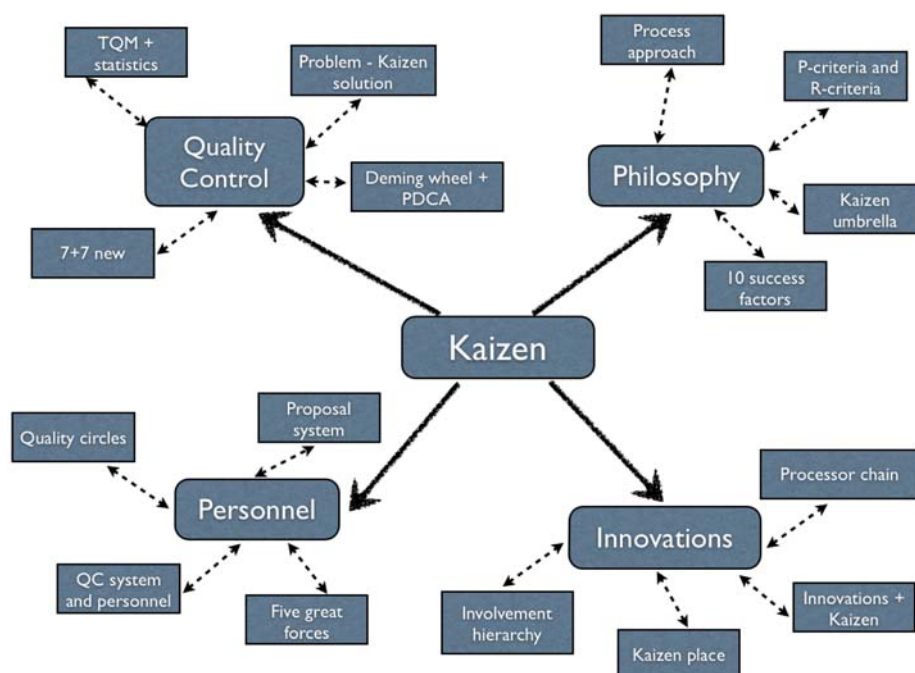
Figure 1: Kaizen concept

- Kaizen philosophy - general insight into the concept of continuous improvement (http://www.kaizen.com/publications/total-flow-management-book.html; Imai, 2004), process approach (Laiker, 2008; http://www.12manage.com/methods_forrester _system_dynamics.html), Kaizen-thinking (Imai, 2004; http://www.emeraldinsight. com/journals.htm?);
- Improvement and innovations - allows to perceive the distinction between innovative development of a company and a continuous improvement oriented strategy with innovation accent (Imai, 2005; Imai, 2004; Wickens, 1987);
- Kaizen and quality control - considering TQC not only as quality control for a product/service but also as a basis for all of the organizational directions of development (Imai, 2005; Robinson, 1990; Wickens, 1987);
- Kaizen and personnel system - a core attribute of efficient organizational performance in the terms of considered concept is coherence between quality control and proposal systems (Imai, 2005; Imai, 2004; http:/www.juse.or.jp/e/; www.questia.com/PM.qst?a =o&d=5000136355).

2.2   Implementation of Kaizen concept

Based on a constructed theoretical basis central elements of Kaizen concept are: philosophy, innovations, quality control and personnel. Modern scientists propose four different approaches of continuous improvement concept implementation: parallel, integrated, coordinated, project.

Parallel approach – improvements are implemented parallel and separately from common activity of the company (http://www.emeraldinsight.com/journals.htm?articleid=850716 &show=abstract; www.tandfonline.com/doi/abs/10.1080/09544120020010084).

Improvements are analyzed and implemented by experts or small groups (including cross-functional teams and project groups with limited involvement into operations) (www.emerald insight.com/0025-1747.htm; Docherty, 1996). Advantage of the approach is transfer of knowledge provided by cross-functional teams. Weak point of the approach is limited involvement of experts.

Integrated approach – improvements are part of everyday activity (http://www.emerald insight.com/journals.htm?articleid=850716&show=abstract; Sako, 2004).

Improvements are analyzed and implemented by operators (individually or in groups). Strength of this approach is that autonomy of operators allows attain higher level of freedom in implementation of changes and stimulates knowledge transfer as a part of everyday job (Ellstro¨m, 2000; http://oer.guenther.ws/node/4).

Coordinated approach – summarizes integrated and parallel approaches and combines experts-driven cross-functional teams for temporary projects and self-managed changes as part of everyday job (www.emeraldinsight.com/1756-669X.htm).

Project approach – some improvements are viewed as projects. Every project has limited time bounds and a point of beginning and ending (Krishnan, Shani, Grant and Baer, 1993). When an improvement is viewed as a project there is a certain risk that if first results would not give sufficient changes - priority of a projects would be lowered (www.emeraldinsight.com/1756-669X.htm). In the context of Kaizen process of changes is perceived as a future-oriented continuous improvement therefore its results could be evaluated only after period of time.

In the considered context one of the most interesting papers is D. Swartling and D. Olausson "Continuous improvement put into practice: alternative approaches to get successful quality program" (www.emeraldinsight.com/1756-669X.htm). In the article authors used case analysis to educe differences in implementation of the four approaches.

Furthermore, papers of great importance on the topic are Lindberg and Berger (1997, 2001) (http://www.emeraldinsight.com/journals.htm?articleid=850716&show=abstract; www.tandfonline.com/doi/abs/10.1080/09544120020010084). In the articles the authors explored implification of Kaizen philosophy as a basis of quality system performance in organization and different approaches for its implementation.

3   METHODOLOGY
Arising question is as following - how to combine advantages of different approaches and to turn improvement process in an organization into a continuous process. According to D. Swartling and D. Olausson results (www.emeraldinsight.com/1756-669X.htm) the most efficient approaches to implementing continuous improvement into a company are parallel and integrated approaches.

 In our paper a new concept that combines characteristics of parallel and integrated approaches will be presented. In Berger (http://www.emeraldinsight.com/journals.htm?articleid=850716&show=abstract) coordinates («basic constructions of task realization» and «task of improvement») a new concept called «combined approach» is located in the same position as coordinated approach - figure 2.

Figure 2: Combined approach in terms of Berger concept coordinates

Core characteristics of the developed concept are:

1   Initial participation of a team of experts as a new element of organizational structure which and transformation into a cross-functional division at a later stage. A new division will act as a permanent «generator of improvement» in organization;

1.1 Participation of experts allows making objective evaluation of processes and overall situation in organization (parallel approach);

1.2 Enjoyment of highly professional experts allows solving complicated problems, which can not be solved by internal organizational resources (parallel approach);

1.3 Formation of a cross-functional improvement generating team (parallel approach).

2   Groups of continuous improvement realize classical Kaizen function. These groups continuously improve processes of their direct influence;

2.1 High level of involvement and motivation of personnel allows achieving continuous process of improvement in organization (integrated approach);

2.2 The groups can independently initiate, plan, implement and evaluate improvement in organization (integrated approach);

2.3 Availability of «cancel of improvement» - members of a group can return to primary standards and patterns without sufficient loss if an improvement does not introduce expected results (integrated approach).

4   RESEARCH METHODS

To analyze the implementation of developed model case method was selected in the work. Case study was conducted on a basis of regional Russian IT company - LLC «Instar Technology». Instar Technology is a regional IT system integrator operating in Perm krai. Number of employees of the company is 75 people. Analysis was conducted in several stages:

- Content analysis of basic strategic documents of the company to educe their compliance with kaizen philosophy: mission, strategy, commitment to excellence, structure of the company;
- General analysis of quality system in the company - quality documents of the company (particularly ISO 9001:2008 certificate) were analyzed;
- Several in-depth interviews (3 interviews with members of the board of management,

7 interviews with managers of functional departments). The interviews accompanied by general analysis allowed to detect the center problem faced by the company;
- Random questionnaire survey of functional division employees of the company (number of respondents - 20 people)
- A «diagram of reasons and relations» was constructed on the basis of obtained results.

5 RESULTS

A critical task for LLC «Instar Technology» revealed in the process of in-depth interviews was formulated as following - transition of quality system in organization into continuous improvement stage. Main problems detected on the basis of in-depth interviews and a survey are absence of system development of improvement and high level of involvement of board of managers into direct control of business processes in organization. Pareto diagram was constructed to understand the reasons of educed problems - chart 1.

Department managers: delegacy skills underdevelopment
Department managers: can not solve complex problems quickly without engaging of higher level of management
Innovation development is driven mainly on the board of management level
Leadind experts of departments: conflict solving skills underdevelopment
Inefficient intercommunication of departments

Chart 1: Pareto diagram for LLC «Instar Technology»

Improvements in the organization are not system due to the reason that «quality control department» mechanism was declined by organizational structure therefore improvements are driven mainly by board of managers. This situation reveals weak points of parallel approach because quality control department was designed by external consulting company. The arising problem can de solved by projecting of alternative mechanisms, which will be organic for the company and will encourage improvement development on a system basis.

5.1 Development of Kaizen concept for LLC «Instar Technology»
The company made a decision to create a new software department, which is cross-functional because experts of the department directly interact with all the other departments of the organization. Software department was selected as a potential expert group of improvement

implementation due to the following reasons:
- Flexibility of the department operational behavior because it is yet not strictly built into organizational structure and interactions;
- Possibility of in-depth interviews and targeted guiding seminars due to the paucity of personnel of the department;
- Cross-functional type of interaction with other departments.

Concept of continuous improvement implementation for LLC «Instar Technology» is embodied in initiation of a pilot project through interaction of technical and software departments. Interaction of the two departments leads to creation of a unique product that is oriented on a particular client. The product is called «an integrated solution» and is a combination of software and hardware components. At the moment LLC «Instar Technology» intends to realize an integrated solution for LLC «Teplov i Sukhov» (figure 3).
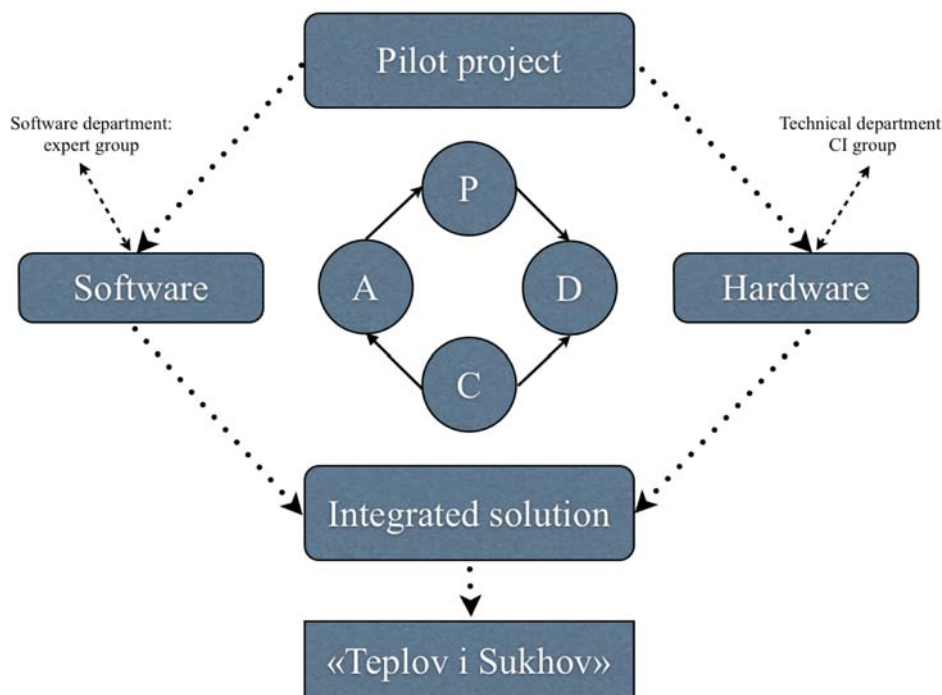
Figure 3: Combined approach of Kaizen concept implementation for LLC «Instar Technology» on a basis of realization of integrated solution

An integrated solution is a completed cycle and demands continuous improvement, refinement and specification on every stage of production. Due to that reason special recommendations on how to form the idea of continuous improvement in software and hardware departments have been proposed:

Stages of integrated solution concept realization:
1. Formation of common information field where experts from both departments in the process of communication could optimize chosen methods - both hardware and software;
2. Creation of an expert group of continuous improvement concept implementation in the software department. In the pilot project the expert team would be oriented on software sphere - specification of software in accordance with the need of the client on the basis of PDCA cycle, process thinking during development of the integrated solution);

3. Creation of continuous improvement group in technical department, which will help to find optimized hardware solutions for the need of the client and to improve processes of equipment assembly;

4. Discussion on the solution's integration in the common information field (everyday meetings). Two-way interaction in the case is the key factor of success due to the reason that it allows to optimize process of integrated solution development and to bring it into maximum compliance with the customer's requirements;

5.2 Expert groups of software department

It is proposed to hire an external expert in the sphere of continuous improvement and business process engineering. Furthermore, it is strongly recommended to find an expert with coaching experience in order to stimulate transfer of knowledge to other departments. Personnel of software department will attain competencies and skills of process thinking, PDCA cycle, continuous improvement during team-work and seminars with the expert. Therefore software department personnel would become a «generator of improvement» in the project of integrated solution development. A new task will be set for software department experts when the project will be finished - transfer their knowledge throughout the organization (which will be realized through cross-functional interactions and series of seminars).

5.3 Continuous groups of technical department

It is proposed to use similar method as quality circles. Special meeting among the group of technical experts (3-5 people) would be organized in order to discuss directions of improvement of the project from technical point of view. After that transfer of knowledge will proceed throughout the technical department. Also it is planned to introduce proposal system and to change motivation system in order to stimulate improvement in organization.

6 FINAL CONSIDERATIONS

Implementation of Kaizen concept in the organization is divided into two directions: expert group's competencies formation from one side and creation of continuous improvement groups, explanation of Kaizen concept and lower level personnel involvement from the other side. Moreover, modernization of interrelation system between board of managers and personnel, division of innovation and maintenance functions. Final considerations on how to launch an initiative impulse of continuous improvement in the organizations are presented in table 1.

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Table 1: Kaizen strategy - combined approach for LLC «Instar Technology»

Kaizen		Philosophy	Innovations	Personnel	Quality Control
Management		Seminars + training	Division of innovation and maintainance functions + training	Five forces of relations between an employee and organization	Seminars + training
Group	Experts	Seminars + training	Seminars + training	Seminars + training	Seminars + training
	CI	Explanation of Kaizen concept	«Classical Kaizen»	Proposal system	Creation of Continuous Improvement groups
Individual		Explanation of Kaizen concept			

7 FURTHER DISCUSSION

Implementability of Kaizen concept on a basis of combined approach for LLC «Instar Technology» was analyzed in the article. First stage of Kaizen concept implementation for the company was also proposed. In the aggregate it is possible to start implementation of Kaizen concept on the basis of current quality system in organization. Expert team that provide training and organize Kaizen seminars subsequently become an organic part of organization and stimulate continuous improvement. Experience gained during realization of pilot project will allow to evaluate the effectiveness of the concept and conclude on advisability of developed mechanisms' scaling enterprise-wide.

Adaptability of developed concept depends on the degree of implementation because Kaizen concept presume complex integration. Separate elements of the system will introduce improvements into organization. However, only four Kaizen elements: philosophy, innovations, personnel and quality control on three concept levels (management, group, individual) allow attain synergy in department interaction and a company will actualize its own «Japanese wonder».

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CONFLICT MANAGEMENT IN AN ORGANIZATION: FORMATION OF CONFLICTOLOGICAL COMPETENCE

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ABSTRACT
In the current socio-economic conditions the level of conflict and work stress in the workplace increases. This is due to different economic, social, demographic and psychological reasons, one of which is the lack of an adequate level of conflictological competence among managers of the organization. However, organizational conflict management skills in the workplace are an important management tool for a manager, as a conscious application of the principles, methods and technology helps to shape and develop the human resources of an organization. The purpose of developing the technology of conflictological training as part of the skill development training is defined as the rationale for formation of an integrated management tool of conflictological competence of the managers and staff of the organization. Programs for conflictological competence of managers and staff of the organization should be comprehensive and allow organizations to choose a variety of management and teaching techniques for major components of conflictological training. Prevention of social and labor conflicts should be aimed at creation of the institutional conditions that minimize the occurrence of destructive conflicts in the organizational and management environment, and based on a comprehensive diagnostics of specific characteristics of the organizational environment and interpersonal relationships in the team. Effective methods of conflicts prevention in an organization are the following: organizational-managerial methods of conflicts prevention, aimed at optimization of activity of organizational and management structure; psychological methods of interpersonal conflicts prevention. Efficiency of this work on conflicts management should be assessed according to dynamics of indicators of employees' readiness to constructive solving of organizational and interpersonal conflicts. Prevention of occupational stress is a system of agreed measures, aimed at development and implementation of the program for prevention of occupational stress among employees as well as further monitoring of the results.

Keywords: Conflictological competence, Occupational stress, Organizational conflict

1 INTRODUCTION

In the current socio-economic conditions the level of conflict and work stress in the workplace increases. This is due to different economic, social, demographic and psychological reasons, one of which is the lack of an adequate level of *conflictological competence* among managers of the organization. *Organizational conflict* management skills in the workplace are an important management tool for a manager, because managers' activity

is always connected with solving of various workplace problems, which can take the form of destructive occupational conflicts, influencing on socio-economic efficiency of an organization activity. Management practice vital demand for development of conflictological competence among organization employees is determined by the following factors:

- poor formation of managers and employees' objectives concerning formation of conflictological competence;
- no complex organizational and methodical guides, ensuring realization of conflictological competence formation;
- uncertainty of organizational and psychological conditions for realization of this process etc.

Development of scientific and methodical and organizational and methodical guides, ensuring realization of conflicts management technology, is the main task of this research.

2 FORMATION OF CONFLICTOLOGICAL COMPETENCE IN THE PROCESS OF MANAGERS" PROFESSIONAL TRAINING

The issues of formation of conflictological competence among organization's managers and employees, creation of technology for conflicts and stresses management, focused on prevention of destructive organizational and social-labor conflicts are relevant.

An opinion poll (2008–2012) was held in the process of this investigation; 15 managers of various Samara region industrial enterprises and organizations participated in this survey. Representativeness of the judgment-based selection was assured by various directions of activities of the investigated organizations (industrial enterprises, state and municipal establishments, agrarian organizations, medical and educational institutions). Alumni of the engineering-economic faculty of the Samara State Technical University were the second group of respondents in the frame of the investigation. 93 alumni were quizzed in 2008–2011. Students of the engineering-economic faculty of the Samara State Technical University were the third group of respondents. 117 2,3,4-year full-time students were quizzed. So, 165 people from these three groups were surveyed in the frame of this part of an experiment.

The study was undertaken by means of questionnaire survey, the authors used the methodic of K. Staroverova. Every group of respondents was offered to answer the questions in the questionnaire, which offered to assess the necessity of conflictological competence for manager's professional activity. For the purpose of substantiation of necessity of conflictological competence for a manager, alumni and managers were offered to evaluate the significance of conflictological knowledge and skills for their professional activity. The results, received concerning this issue, are represented in Table 1.

Table 1: Evaluation of significance of conflictological competence for managers' daily professional activity

Types of knowledge and skills	4-5 year SamSTU students		Alumni of IEF of SamSTU		Managers of organizations	
	Average score	Gave more 3 scores, %	Average score	Gave more 3 scores, %	Average score	Gave more 3 scores, %
Knowledge and skills in the field of organizational conflicts diagnostics	4,4	80,3	4,3	84,5	4,5	85,3
Knowledge and skills in the field of prevention the occupational, working and job stresses	4,2	74	4	72	4,4	82,3
Knowledge and skills in the field of managing the organizational conflicts and occupational stresses	4,4	85,2	4	80,5	4,2	85
3 Knowledge and skills in the field of taking measures in the frame of anticonflict program	4,3	77,5	4,5	91	4,7	87,1

The questionnaire results show, that knowledge and skills in the field of organizational conflictology play an important role for professional activity of alumni and managers of organizations. Skills in the field of organizational conflicts diagnostics as well as in the field of management of organizational conflicts and occupational stresses have the highest rates from the standpoint of relevancy. All the groups of respondents were asked the following question: Which knowledge and skills in the field of conflicts management in an organization must manager have. 85% of students, 77% of alumni and 73% of managers said that the following knowledge and skills are among the vital ones: knowledge of basics of occurrence and resolving the labor disputes and organizational conflicts in work collective and ability to put this knowledge into practice; ability to prevent professional deformation and professional burnout among employees.

As for important skills, the managers and alumni also mentioned ability to manage conflict process and correction their behavior in the process of conflict; mastering the technology of mediation activity for solving the conflict situations, taking into consideration individual and psychological characteristics of business and interpersonal communication. Answers of alumni and managers to a question: "In what sphere would you like to improve your knowledge and skills?" are turned out to be significant. Almost all the alumni (84%) and every second manager (54%) would like to improve the level of their conflictological competence (54%). In the process of discussions with alumni it was discovered, that nowadays enterprises need competitive, initiative, competent, stress-resistant and

communicative managers, who are able to analyze conflict situations and reach managerial decisions. Discussions with employers has shown, that modern organization needs highly qualified specialists, who are able to self-evaluation and ready to research work; they also must be conflict-resistant and focused on professional and personal development. To achieve the goals of an organization one should constantly pay attention to the fullest disclosure of individual and personal abilities of employees and their rational use; and to assure this one should provide organizational conditions for vocational education and development of organization's managers and employees.

Special conflictological training and formation of employees' conflictological competence allows them to fulfill their professional duties under more favorable conditions. System of personnel education and professional development fulfills series of functions, assuring growth of human resources value and quantitative worthiness as well as sustainable competitiveness of an organization. Conditions, needed for providing the corporate training, are the following: availability of long-term organization's development strategy; formation of active personnel policy on the base of organization's development strategy; providing of professional HR service; systematic investments for personnel development; participation in work on system for top managers' professional training and development.

In 2010–2011, the authors of this research held an opinion poll among 5 year students and alumni of engineering-economic faculty of the Samara State Technical University. The aim of this research was clarification of the respondents' opinions (120 respondents) concerning efficiency of various modes of study. Analyses of the respondents' answers has shown, that traditional modes of study (lectures, seminars) have got the lowest appraisals among all the groups of respondents as opposed to the modes, better activating creative and searching activities of students. The highest results deserved active modes of study, implying maximal practical use of knowledge, gained in the process of learning of conflictology.

So, in the process of managers' conflictological training one can use four groups of methods, related to stages and levels of team working:
- methods for providing the positive motivation (consideration of personal educational achievements, providing the psychologically comfortable learning environment);
- methods for organization of interactive and cognitive as well as practical activity of a student (discussions, solving tasks on the base of analyses of particular situations, preparations of presentations and reports, research and development projects);
- reflexive and estimating methods (analyses of control, intercontrol and selfcontrol results, diagnostics of difficulties, connected with education);
- methods for development of personal educational milieu (attracting the personal experience of a student, practical orientation, working with additional sources of information).

Personnel conflictological training, focused on formation of conflictological competence, encourages development of professional knowledge and skills of employees; and this, in its turn, encourages the growth of competitiveness on the job market and increases the value of organization's workforce capacity. Personnel's training gives an opportunity to find out potential leaders and form a candidate's pool.

2.1 Methods

In the process of this investigation the following group methods were used:
- theoretical and constructive methods: analyses and design, comparison, modeling, classification;
- empirical methods: particular methods (direct, indirect and participant observation, polling, discussions, testing, generalization of independent characteristics);
- methods of mathematics-statistical data processing.

2.2 Results

In the result of empirical study, the mechanisms of formation of organization employees' conflictological competence have been revealed. Study materials are destined to help managers of all levels to find out and prevent destructive organizational conflicts.

3 RECOMMENDATIONS

Realization of the proposed technology should be followed by creation of favorable organizational conditions, encouraging efficiency of process of managers' conflictological training. The main direction for realization of this technology should be creation of organizational conditions for professional training and development of personnel. Programs for formation of conflictological competence among organization's managers and personnel should have complex character and allow organization to create different managerial and pedagogical techniques and tools according to the main components of conflictological training and with clearly predefined expected results.

4 CONCLUSION

The authors set the further research tasks:
1. Develop purpose-oriented program for formation of conflictological competence.
2. Reveal organizational conditions, encouraging formation of employees' positive attitude to realization of technology for organizational conflicts management.

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THE BALANCED SCORECARD OF THE FIRM'S HIMAN CAPITAL (ADOPTED FROM RUSSIAN INDUSTRIAL FIRMS)

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ABSTRACT
The Balanced Scorecard (BSC) of the firm's human capital, which considers Russian special features of industrial firm's development and based on the process approach, has been proposed. The model, developed by the authors, involves firm's financial indicators, quantitative and qualitative indicators of the human capital, economic indicators of the human capital and firm's marketing metrics. The model is characterized by the following principles: complexity, purpose correspondence and specificity.

Keywords: Firm, Human capital, The Balanced Scorecard

1   INTRODUCTION

Modern development of economics proves that people play a very important role in a *firm* and forms the concept "*human capital*". Using the concept "human capital", introduced by T. Shultz and G. Becker (1975) in 50–60 of the XX century into terminology of economical analyses, in this work we try to make it more specific and define it as "firm's human potential" as well as to create a scorecard for human capital evaluation in the frame of a firm.

2   THE BALANCED SCORECARD OF THE FIRM'S HIMAN CAPITAL

The information period, appeared in second half of the XX century, has led to changing the measures of efficiency evaluation and creating a new scorecard; Robert S. Kaplan и David P. Norton were the authors of this scorecard. *The Balanced Scorecard* (BSC) was developed in 1990–1992; now it is improved and used by many companies throughout the world (Norton and Kaplan, 2010). First and foremost, it is based on the following: comprehensive consideration of various changings for purposes of a firm and increase of human role in a firm.

Using content analyses and questionnaire survey, the authors discovered which instruments and technologies are used for assessment of firm's human capital and efficient from the standpoint of management of Russian firms (Table 1).

Table 1: The most important instruments and technologies for assessment of firm's human capital (the poll's results of managers of Russian firms, 2012)

Method of assessment	Number of responds	Arithmetic mean	Median	Standard deviation
Budgets	151	4,50	5,00	2,20
Analyses of deviations	148	4,14	4,00	2,02
Continuous forecasting	147	4,75	5,00	1,92
Strategic management account/controlling	148	4,92	5,00	1,91
BSC	138	3,68	4,00	1,81
ABC	150	4,99	6,00	1,97
VAA	148	3,79	4,00	2,05
EVA	145	3,83	4,00	2,05
Total quality management	150	4,67	5,00	2,00
Standard costing method	145	3,62	4,00	2,04

Response dispersion in importance of the technologies is much the same and vary between 1,81 and 2,20. It means that no technology dominates over other technologies.

From our point of view, BSC has been undervaluated because respondents don't know enough about it. The first publications appeared in Russia only in 2002 (Nikolaeva and Alekseeva, 2010). Meanwhile it is very useful, because it allows better agreement of current interests and goals of the main business participants. Many respondents considered it's necessary to combine several technologies.

According to our predictive estimation, in the coming years such technology as the Balanced scorecard in the context of the human capital as assuring and supporting resource will be most perspective for Russian firms for business development.

So, on the base of the Balanced scorecard, Fitz-enz proposed "the example of the Balance scorecard of corporate human capital", which includes financial indicators (profit from the human capital , expenses for the human capital, added value of the human capital, commercial value of the human capital) as well as "human indicators", such as percentage of employees with standard working day, percentage of part-time employees, indicator of increase in workforce, average percentage of profit from all the expenses for the workforce and investments in the improvement of employees (Fitz-enz, 2006).

"The example of the Balance scorecard of corporate human capital", proposed by Fitz-enz, contains specific indicators, which are not typical for Russia, such as "added value of the human capital", that's why it is not convenient to use its original version for assessment of the human capital in Russian firms. But it can be adapted and taken as a basis for the Balanced scorecard of assessment the firm's human capital, considering special features of Russia.

Its authors believe that one of the main conditions for successful use of BSC is availability of information for employees of all the levels. If top-managers must know what will lead the firm to long term financial success, then employees, communicating with clients, must understand the financial consequences of their decisions, concluded in the process of their duties performance. The aim of BSC is to transform the mission of the firm into certain measurable indicators. In such a case, keeping in mind the meaning of the system's name, the balance must be reached between external reported data for possessors (shareholders, state), consumers and internal characteristics of the most significant business processes, innovations, training and growth. For the modern firms BSC is not only tactical assessment system, it is also a tool of strategic management.

When forming the Balanced scorecard for assessment of firm's human capital, the authors based themselves on analyses and evaluation of contingence of commercial entities performance indicators. Contingence of indicators means particular and their magnitudes relation which is in compliance with general notions about progressive development or predetermined targets. Contingence may be direct or indirect, depending on cause-effect definiteness of the correlated indicators. As a rule, the indicators are in stochastic dependence (i.e. the dependence develops not in every case, it develops in general, considering a big number of investigations); this dependence is developing in the process of managerial monitoring of these indicators.

To reflect the operable linkage in the sort of "double loop" (Norton and Kaplan, 2010), the authors reveal dependences. Strategies in the field of development of the firm's human capital are derivatives of the firm's business-processes. The business processes are mediated by resources, which the firm possesses. The required resources are determined by indicators of the firm's activity results.

Taking all the before said into consideration, to define the indicators, composing the Balanced scorecard for assessment of the firm's human capital, it's necessary to take a complex of interdependent measures:

1. on the base of the expert poll, to reveal the indicators of the firm activities results, which are the most valued and required from the perspective of various groups of consumers, such as shareholders, particular commercial entities, branches of national economics as a whole;
2. on the base of the analyses of the business internal condition, to find out the resources, attracted for running of the firm as well as how these resources are used for realization of the business processes;
3. to assess the relationship between the resources, business processes and strategy in the field of the human capital development, taking into consideration three groups of relations:
   - indicators of results– resources;
   - resources – business-processes;
   - business-processes– strategies in the field of development of the firm's human capital.

Let's give a form to three groups of relations. If by X = (X1, X2, …, Xn) one symbolizes the indicators of results, by Y = (Y1, Y2, …, Ym) one symbolizes the resources, by Z = (Z1, Z2, …, Zk) one symbolizes business-processes, by C = (C1, C2, …, Cl) one symbolizes

strategies, then the relations, established between the selected groups can be posed by certain matrixes − {XY}, {YZ}, {ZC}, represented on figure 1.

Y Z *Matrix of resource use for the process realization*						**Resources of the firm**	*Matrix of indicator of results' XY dependence on characteristics of the resource*					
Z11	Z12	Z13	Z14	Z15	Z16	Human resources	X11	X12	X13	X14	X15	X16
Z21	Z22	Z23	Z24	Z25	Z26	Management competences	X21	X22	X23	X24	X25	X26
Z31	Z32	Z33	Z34	Z35	Z36	Intangible assets	X31	X32	X33	X34	X35	X36
Z41	Z42	Z43	Z44	Z45	Z46	Financial resources	X41	X42	X43	X44	X45	X46
Z51	Z52	Z53	Z54	Z55	Z56	Organizational resources	X51	X52	X53	X54	X55	X56
Z61	Z62	Z63	Z64	Z65	Z66	Information resources	X61	X62	X63	X64	X65	X66

The firm's business-processes in the field of: Recruitment and adaptation; Estimation and attestation; Training and development; Motivation and stimulation; Formation of candidates pool; Internal PR

Human capital of the firm

Indicators of the firm's activity results: Work performance; Profit; Breakeven; Pay-off from investments to the human capital; Maximization of net assets; Enhancement of the commercial goodwill

Y11	Y12	Y13	Y14	Y15	Y16	Strategy 1	C11	C12	C13	C14	C15	C16
Y21	Y22	Y23	Y24	Y25	Y26	Strategy 2	C21	C22	C23	C24	C25	C26
Y31	Y32	Y33	Y34	Y35	Y36	Strategy 3	C31	C32	C33	C34	C35	C36
Y41	Y42	Y43	Y44	Y45	Y46	Strategy 4	C41	C42	C43	C44	C45	C46
Y51	Y52	Y53	Y54	Y55	Y56	Strategy 5	C51	C52	C53	C54	C55	C56
Y61	Y62	Y63	Y64	Y65	Y66	Strategy 6	C61	C62	C63	C64	C65	C66
ZC *Matrix of process's dependence on the type of the strategy*						**Strategy for development of organization's human capital**	**XC** *Matrix of indicator of results' dependence on the type of the strategy*					

Figure 1: Model of the Balanced scorecard for assessment of the firm's human capital

Arrows denote the connections inside the group; in cells of certain matrixes, the quantitative estimations of dependence level between indicators of results and resources, resources and business-processes, business-processes and strategies for the human capital development are sequentially specified on five-grade scale using the expert method.

To estimate the dependence between indexes of results and strategies in development of the firm's human capital, one determines the level of certain business-process's impact on formation of particular indicator of results through computation of weighted average mean of resources use rate in realization of this business-process, weighted according to the level of dependence on this resource characteristics of every indicator of results:

$$\{XZ_{ij}\} = \frac{\sum\limits_{k=1}^{m} YZ_{kj} \times XY_{ik}}{\sum\limits_{k=1}^{m} XY_{ik}} \tag{1}$$

where:

XZij – assessment of certain business-process's impact on formation of the particular indicator of results;

YZkj – assessment of resource use level in realization of the business-process;

XYik – assessment of the level of indicator of results' dependence on characteristic of resources

So, on the base of the received matrix, in the same way one defines the level of indicator of results' dependence on the strategy for development of the firm's human capital:

$$\{XC_{il}\} = \frac{\sum\limits_{j=1}^{k} ZC_{jl} \times XZ_{ij}}{\sum\limits_{j=1}^{k} XZ_{ij}} \tag{2}$$

where:

XCil – assessment of the level of indicator of results' dependence on the strategy for development of the firm's human capital;

ZCjl – assessment of the level of manageability of business-process strategy.

On the base of the received interdependent business-processes, resources, strategies and indicators of results, one reveals weight numbers of strategies for development of the firm's human capital:

$$Wl = \frac{Cjl}{\sum\limits_{j=1}^{l} Cj} \tag{3}$$

Wl – weight number of l strategy for development of the firm's human capital;

Cjl the sum of assessments of the level of indicator of results' dependence on 1 strategy for development of the firm's human capital;

Cj – the sum of assessments of the level of indicator of results' dependence on the strategy for development of the firm's human capital.

3   CONCLUSION

From the perspective of modern requirements to assessment of the *human capital*, the proposed model outstanding features are the following. Firstly, the realization of "complexity" principle is typical for this model; it means that both quantitative and qualitative components of *firm's human capital* as well as its impact on *firm's* financial indicators and its position on the market are analyzed. Secondly, the realization of the "purpose correspondence" principle, that is expressed in transformation of *firm's* strategic goals into operative goals and bringing them to particular performers. Thirdly, "specificity" principle is realized, because the model is developed subsequent to the results of content analyses of the reporting and current information, received in Russian industrial *firms*.

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Enterprise in Turbulent Environment

GAINNING COMPETITIVE ADVANTAGES THROUGH PROMOTIONAL ACTIVITIES OF THE ENTERPRISE – THE CASE OF LIBERTAS BUSINESS COLLEGE

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ABSTRACT
In the era of the new economy and in the time of economic crisis, higher education institutions are facing with various business problems. Everyday increase in the number of business schools intensifies competition in the market, and reduction of student's income affects most of business schools revenues. Due to these problems we need to find an answer to the question: how to attract potential students to our school? This paper wants to show one of the methods to attract potential students, i.e. clients of a business schools, and that method is improvement of promotional activities of the school. This paper presents the results of the empirical study (N = 600) in the period from the year 2008 to the year 2012. The study was conducted with students at Libertas Business College in Zagreb. The analyzed data provide us with information's and school requirements that are crucial for students' decision of continuing education at this College. The practical implications of the research are reflected in the acquisition of competitive advantages in the field of higher education.

Keywords: Competitive advantages, Entrepreneurship, Higher education, Marketing Promotional activities

1 INTRODUCTION

The role of knowledge and education in contemporary society has been considerably extended and conditioned by great expectations for the impact on development of the community. Given today's presence of the labor market and the market knowledge, the institutions of higher education are making the request for an increase in marketing orientation in their business (Šimić and Čarapić, 2007). Marketing is a two-way communication system and represents an analysis, planning, implementation and control of carefully developed programs aimed at achieving voluntary exchange in specific markets. It relies on the needs and desires of the target groups, effectively pricing, promotion and distribution in order to inform, motivate and serve the market (Kotler and Fox, 1985). Furthermore, marketing of education has assumed an increasingly important role both in the means of classic advertising (e.g., newspapers, billboards, radio, television), as well as a new means of communication through mobile telephony and information technology (e.g., text messages, web pages, social networks, email) (Kos, Trstenjak and Kralj, 2011). In education, the application of marketing activities has certain characteristics because the mission and objectives of the educational institutions, as nonprofit organizations, differ from the goals and objectives of profit

organizations (Mihanović, 2008). In other words, marketing of non-profit organizations is a set of activities that creates and facilitates planning, implementation, dissemination and communication of organizations that provide some specific public interest (Pavičić, 2003). Given that education has its educational function, which implies a certain behavior that we would like that target audience accept, marketing in education is defined by the following characteristics: the final product is in the form of intellectual services that is paid indirectly, promotion is usually by word of mouth and it consist of personal observations and expectations, the rational motives dominate over the emotional motives, once acquired loyalty to a particular educational institution is relatively difficult to abandon it (Meler, 1994).

Today in economics, as in other sectors, great attention is given to the concept of lifelong learning which has led to many countries, including the Republic of Croatia, to the establishment of new higher education institutions (Agency for science and higher education in Croatia, 2012). In order for those institutions to gain competitive advantage in the market, the knowledge and the accurate information about potential students / business clients is one of the basic requirements for the business. The aim of this paper is to show the ways of gathering information, by prospective students, about opportunities which studying at Libertas Business College gives to them.

2   PROMOTIONAL ACTIVITIES OF LIBERTAS BUSINESS COLLEGE

Libertas Business College is a private higher education institution, in accordance with the Bologna Declaration and the Croatian legislation, which is implementing professional study of economics based on the "3 + 2" system (e.g. studies of undergraduate business economics in the duration of three years, and graduate professional studies in the duration of two years). Professional Studies and Graduate Studies performed by Libertas Business College represent improved, streamlined and fully customized programs designed for specialized professional study groups of future economic experts. In order to successfully compete with other business schools Libertas Business College is using promotion as a method of introduction of the study programs to the new and prospective students. Promotion is any form of communication with the role of information, persuasion and / or reminding people about products, services, image, ideas and social inclusion, and includes a systematic decision-making of an individual or organization (Belch, 1988). Advertising is done through interactive ads in newspapers, television and radio spots, painting trams with Libertas Business College, posters, brochures, and a slogan "Knowledge is freedom". Every year, in almost every high school in Croatia, Libertas organizes presentations to seniors about possibilities and programs at the Libertas Business College. Furthermore, it organizes the "Days of open doors" in order that potential students could see the space, meet the teachers, talk to students and attend if desired specially organized lectures and workshops. Libertas Business College, together with its employees, presents itself every year at festivals of Zagreb University. As an indispensable channel of communication in the placement of information on opportunities to study, data collecting and interaction with potential students, Libertas is using the opportunities of the Internet and information technology. Internet and the website are a sort of permanent showcase of available information about the study and assisting in the collection of data (e.g. by registering online for the study) for potential students, and establishing further communication (e.g. sending various notifications by e-mail). Following the technological advances and social interactivity Libertas joined the popular social network Facebook in order to distribute relevant information's on an informal, accessible, quickly and effectively way.

3   ANALYSIS OF EMPIRICAL RESEARCH

This empirical research included 600 potential students while accessing entrance examination for the period from 2008 to 2012 (Table 1). In the survey carried by potential students, filled in the accession of the entrance examination, questions were enquired about the source of information that students have about Libertas Business College. In doing so survey offered the following answers which students needed to answer by circling: a) orally from current or former students of Libertas Business College, b) orally from teachers of Libertas Business College, c) orally from people who are not directly associated with Libertas Business College, d) from Libertas Business College at the presentation in my high school, e) by Internet, f) through fairs / festival, g) through flyers / posters, h) through newspapers, i) by radio, j) by TV, k) by any other means. Data collected by the questionnaire were analyzed by descriptive statistics and summarized in the following tables and graphics.

Table 1: Summary results for the number of respondents in the period from 2008 to 2012 (research by authors)

Year	Number of responders
2008	206
2009	113
2010	166
2012	115
Total	**600**

Chart 1 shows that 48.65% of the responders in the year 2008 identified the source of information about Studies at Libertas Business College as orally; 35,81% orally from present or former students of Libertas College, 1,35% orally from Libertas professors, 11,49% orally from people not directly associated with Libertas College. At second place responders identified Internet (27, 70%) as a source of their information about Libertas Business College, and at the third place is presentation at students' high school with 7, 77%.

Chart 1: Representation of the source of information about Libertas Business College among potential students in the year 2008 (research by authors)

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Chart 2 shows that 59.86% of the responders in the year 2009 identified the source of information about Studies at Libertas Business College as orally; 49,30% orally from present or former students of Libertas College, 1,41% orally from Libertas professors, 9,15% orally from people not directly associated with Libertas College. Again, at second place responders identified Internet (29, 58%) as a source of their information about Libertas Business College, and at the third place is presentation at students' high school with 4, 23%.

Chart 2: Representation of the source of information about Libertas Business College among potential students in the year 2009 (research by authors)

Chart 3 shows that 35.91% of the responders in the year 2010 identified the source of information about Studies at Libertas Business College as orally; 24,09% orally from present or former students of Libertas College, 2,27% orally from Libertas professors, 9,55% orally from people not directly associated with Libertas College. At second place responders identified Internet (30%) as a source of their information about Libertas Business College, and at the third place is presentation at students' high school with 20, 91%.

Enterprise in Turbulent Environment
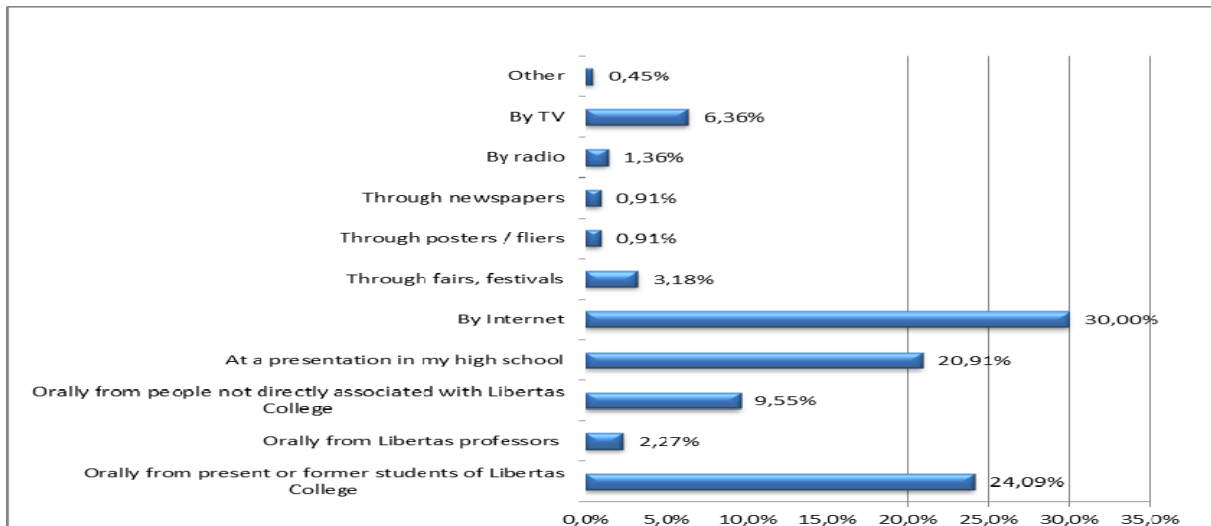
Chart 3: Representation of the source of information about Libertas Business College among potential students in the year 2010 (research by authors)

Chart 4 shows that 45.97% of the responders in the year 2012 identified the source of information about Studies at Libertas Business College as orally; 28,35% orally from present or former students of Libertas College, 6,51% orally from Libertas professors, 11,11% orally from people not directly associated with Libertas College. At second place responders identified Internet (30%) as a source of their information about Libertas Business College, and at the third place is presentation at students' high school with 20, 91%. In this academic year Libertas Business College introduced some new ways of communication with potential students with Facebook and Libertas own web page. From the next chart we see that was very smart action because with those methods Libertas Business School introduced itself to 23,75% of potential students. Furthermore, in the year 2012 Libertas introduced a questionnaire to all enrolled students in order to examine why did students come to Libertas Business School, and what made the crucial impact on them in order to study at Libertas (Chart 5). From the results we can notice that majority of students is enrolled at Libertas because of quality of study program 30,30%, on the second place is quality and ways of teaching 24,62, and on the third place is opportunity to find adequate employment after finishing Libertas Business School 20,83%.
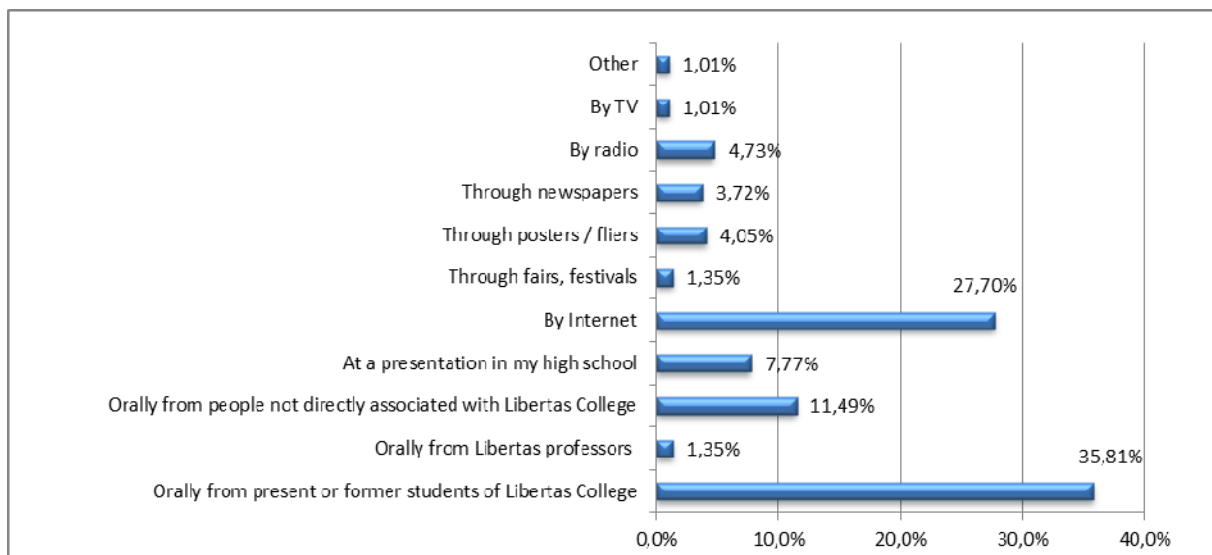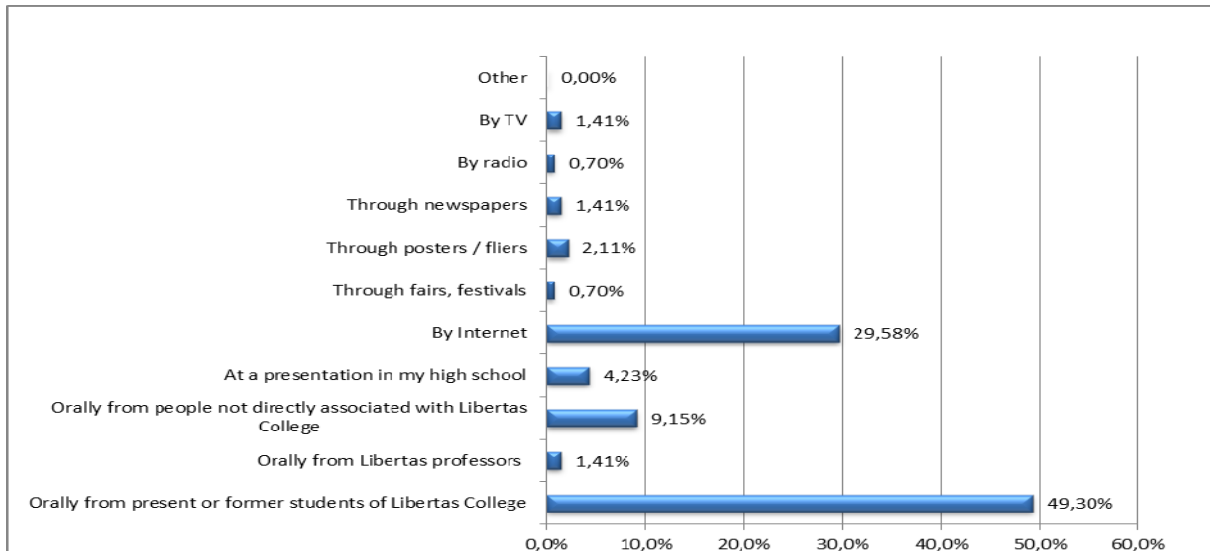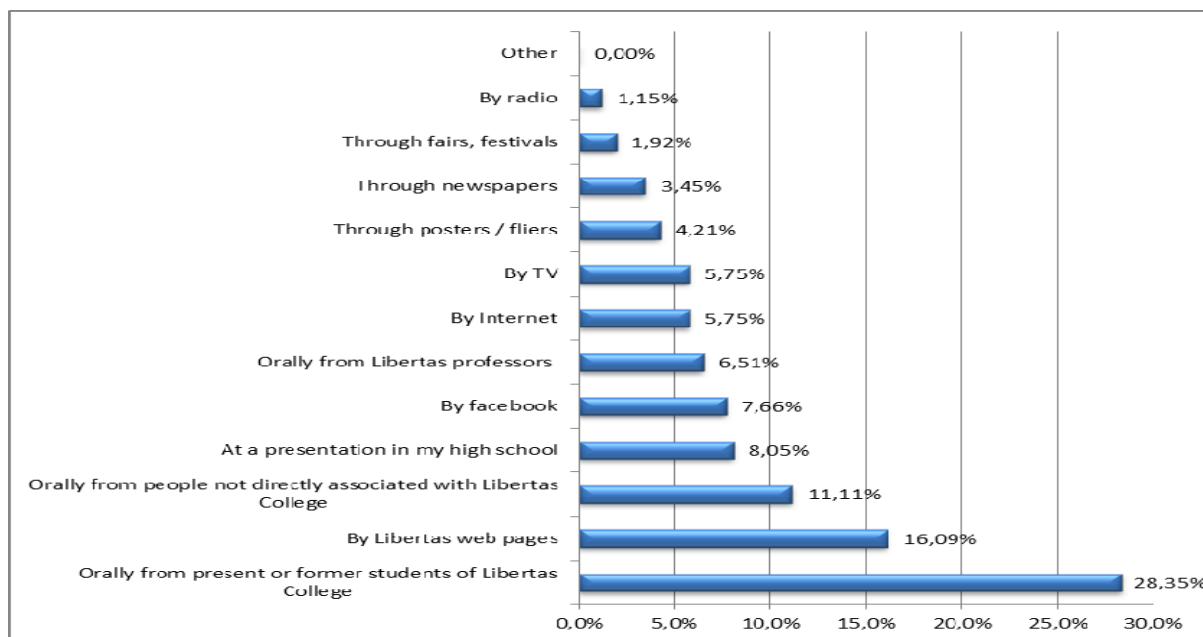
Chart 4: Representation of the source of information about Libertas Business College among potential students in the year 2012 (research by authors)
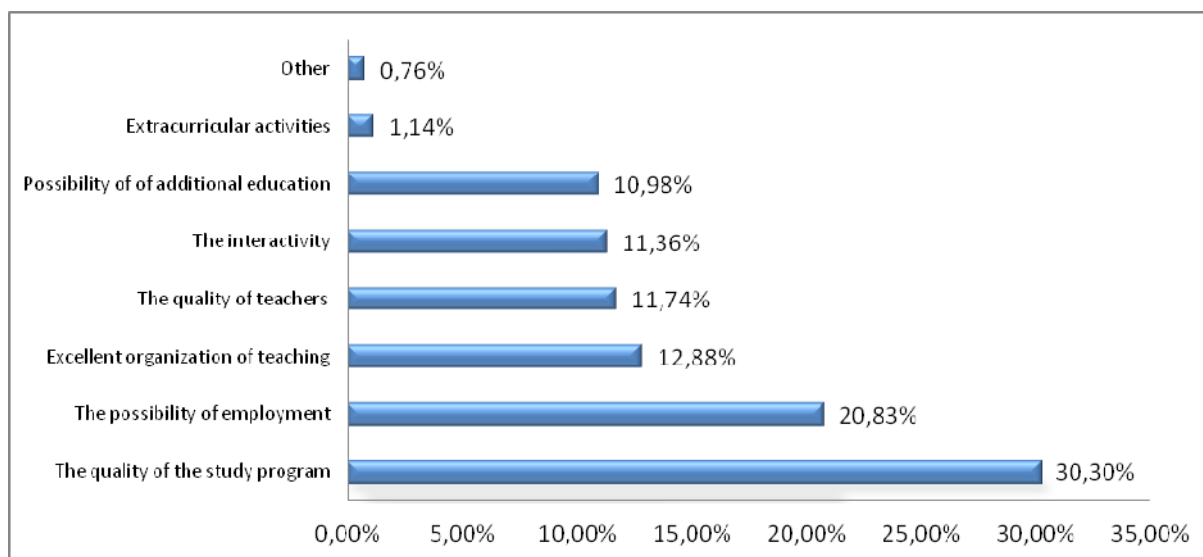
Chart 5: Advantages of studying at Libertas Business College (research by authors)

4 CONCLUSION

The result of the empirical study shows that the most common source of information, among potential students, about the study at Libertas Business College is orally transmitted by current or former students. This indicates satisfaction with the choice of studies at Libertas Business College by current and former students. Also, satisfaction in studies is proved to be successful promotional activity in others higher education institutions in Croatia. The second most important source of information, among potential students, about the study at Libertas Business College is Internet. Given that for the population of young people in the modern age is almost imperative to use the Internet and Social networks, Libertas Business School started to use those methods of communication in year 2010. In the year 2012 promotional campaign

on Facebook has been extended with interviews with professors, notifications about daily news from the economy, notification about student travels with photo-documentation, invitations of students to take a part in humanitarian actions (e.g. the purchase of incubators for premature births infants), and organization calls for various students gatherings.

Presentation of Libertas Business College, as a source of information for potential students, to seniors in high schools was significantly represented in year 2010 with 20.91%. Other used interactive forms in that year, such as advertising through various media, did not give sufficiently good results. However, it is common that educational institutions advertised itself through newspapers, radio, TV shows, flyers, and others; therefore, it is necessary for Libertas Business College to be present at those markets and at those forms of presentation.

Through the analysis of this empirical study we see the necessity of continuous quality improvement in academic programs, improvement in the performance of the teaching process, improvement in the quality of the teaching staff, and improvement of personalized relationships with current and former students. Furthermore, these improvements are necessary because only satisfied students will promote a school that gives them a quality education and provides a competitive advantage in the labor market. This research was focused on customer satisfaction because of everyday pressure of the state and society. Moreover, institutions of higher education need to achieve the best possible relationship between what they provide and the funds they receive. We believe that it is evident from the research that Libertas Business College is doing a great job as a one of the higher educational institutions in the Croatia and therefore, successfully draws more and more new students from year to year.

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PROCESS-ORIENTED MANAGEMENT IN PUBLIC AND PRIVATE SECTOR[1]

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ABSTRACT
Purpose *– The purpose of the paper is to present differences in the process-oriented management in organizations of the public and private sector and their consequences and to suggest areas for further research.*
Design *– This is a theoretical paper based on a literature review.*
Findings *– The processes management is based on the foundation that actions should be optimized from a perspective of processes, which create the dynamic image of the organization's operation. And processes are nothing else as sequences of activities transforming ideas and efforts of members of the organization into the effect desirable by the client. Therefore implementation of the process-oriented management in organizations of the public administration could facilitate tracking current state of clients' needs and recognition of new states resulting from changes of citizens' needs or legal requirements.*
Research limitations/implications *– The paper is theoretical, and empirical research to test the results is required.*
Practical implications *– The findings can be used to enhance process-oriented management systems within both the public and private sectors.*
Originality/value *– The paper provides an overview of the state of process-oriented management and their consequences within public sector organizations and explains the possible difficulties of process-oriented management especially in public sector.*

Keywords: Private sector organizations, Process-oriented management, Public sector organizations

1 INTRODUCTION

Process management is based on the assumption that activities should be optimized from the perspective of processes, which constitute dynamic picture of functioning of organization. These processes are nothing else like sequences of activities, which transform ideas and efforts of members of organization into expected by a customer outcome. Therefore implementation of process management into public administration organizations could facilitate tracking customers' current needs and identifying new needs, which result from either changes of needs of citizens or changes of legal requirements. The process character of organization may also facilitate organizational involvement of its members and cooperation between them; it may also make internal communication more efficient. In functional approach, which is the most widespread in public sector public entities, manager assigns and enforces tasks in compliance with strictly specified procedures; to meet manager's

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expectations seems to be the top priority. It may result in shift of the sense of accountability: results of activities are less important than modes of activity and acting in compliance with instructions is perceived as a warranty of efficiency.

The interest in public sector organizations stems first of all from significance they have for economy of each country. Secondly, it is related to the impact they have on lives of all citizens. Characteristic features of these organizations, which make them different from private sector organizations, are political and social rationality, which rarely go hand in hand with economic rationality. Action strategies, which are adopted are the result of political game, which is not conducive to setting difficult to measure and/or long-term goals (Kożuch, 2006, p. 89). Due to political sensitivity of these organizations and cyclical changes of authorities, they function in less stable environment than private sector organizations. In spite of the fact that market pressure on public sector organizations is smaller than on private sector organizations, their position is not privileged. It is connected with double role citizens play. On the one hand, as inhabitants, citizens and taxpayers living in a given country they are subordinate to it. On the other hand, as service receivers they are in superior position.

In recent years, both in Poland and in the world, very dynamic changes in the sphere of public administration have taken place. Part of them was related to use of concepts and methods of management drawn directly from private sector (Heracleous and Johnston, 2009, pp. 373–374). Process management is one of them (MacIntosh, 2003, p. 327). Process approach has been known since the time of the Classical School, yet since then it has changed significantly and has evolved into BPM (Business Process Management) (Grajewski, 2012, p. 21). The concept of BPM in its current shape emerged in 1990s.; it was inspired by earlier frameworks such as TQM (Total Quality Management) and BPR (Business Process Reengineering) (Brocke and Sinnl, 2011, p. 357). Many authors who explore the concept of BPM focus mainly on its 'hard' aspects, such as organizational structure, development of processes and use of new information technologies (Gulledge and Sommer, 2002, pp. 364–376; MacIntosh, 2003, pp. 327–344; Sentanin, Santos and Jabbour, 2008, pp. 483–496).

2   PROCESS MANAGEMENT

Process management in private sector was the most popular in the middle of 1990s (Houy, Fettke and Loos, 2010, p. 637), it was then when first publications on this concept in the context of public sector began to appear. However, the topic of process management in the context of public sector was much less discussed than in the context of private sector. And a few publications, which addressed the subject, focused on re-engineering organizational structure from functional one to process one (Gulledge and Sommer, 2002, pp. 364–376), identification (Sentanin, Santos and Jabbour, 2008, pp. 483–496), optimization (Hesson, 2007, pp. 707–727), efficiency (Coulson-Thomas, 1997, pp. 118–132; MacIntosh, 2003, pp. 327–344), identification of processes owners (Ongaro, 2004, p. 81–107), linking these processes with IT tools (Gulledge and Sommer, 2002, pp. 364–376), drawing attention to customer's perspective (Ongaro, 2004, pp. 81–107), (Coulson-Thomas, 1997, pp.118–132), and impact of external factors on implementation of process management (MacIntosh, 2003, pp. 327–344; Helfert, 2009, pp. 937–952).

Implementation of process management in public administration is advisable since there is a necessity to understand customers' current needs and to identify new needs resulting from changes of citizens' needs or legal requirements (Krukowski, Siemiński, 2011, p. 23). These are not only arguments in favor of it. Elements that prove inefficiency of functional approach

(the opposite of process approach) are connected with focus on meeting expectations of manager, who assigns and enforces tasks in compliance with strictly specified procedures. It may result in shift of the sense of accountability: outcomes of activities are less important than modes of activity and acting in compliance with instructions is perceived as sufficient warranty of efficiency (Sikorski, 2000, p. 110).

Thus generated bureaucracy brings about depersonalization of interpersonal relationships, which is a result of formalizing communication and peculiar superiority of stamps and signatures on documents over people, their actual problems and organization as a whole (Kołodziejczak, 2011, p. 465).

It may trigger so called local attitudes, that is situations when employees concentrate solely on things, which concern their work and tasks. In consequence, wider perspective may be lost (Sikorski, 2000, pp. 175–179). The result of such an attitude may be conservatism oriented towards stabilization and strengthening of existing norms, values and patterns of behavior; changes are unwelcome and past is a guide for the future (Kołodziejczak, 2011, p. 465).

The most common stages of process management implementation are as follow:
1. Benefits realization. The most common mistake at this stage is a lack of full understanding of what process management consist in. In many cases even supporters of process management lack comprehensive knowledge on methodology, the core and challenges of the method. Lack of awareness is a result of lack of experience, which is crucial to create, develop and sustain the awareness
2. The desire to implement. This is the critical stage that requires a leader and a master, who are able to represent different parts and levels of organization; they may be top-level managers, managers of departments or units, or heads of teams
3. Implementation on the level of a chosen process is connected with strengthening of potential and credibility of the method. At this stage employees the most often start to identify themselves with the method since they realize personal benefits from employing it.
4. Implementation on the level of the whole organization. This stage may take three to five years. It requires designing methodology and choosing methods, techniques and tools, which take into account organization peculiarity; they have to be documented, implemented, passed on and actively sustained. It is achieved by mapping processes; it allows to define modes and subsequent stages of organization improvement. When accountability is assigned and mapping of processes is accepted, carriers of process management should be scrutinized once again
5. Organization has full awareness of its processes and process management center of excellence is created (Rosemann, 2008, p. 1).

Passing through subsequent stages until process maturity is achieved takes different shapes and depends on organization. However, one may identify six key factors, which have an impact on effective implementation of BPM (Bandara, Alibabaei and Aghdasi, 2009):
1. Strategic alliances – ongoing integration of organizational priorities and organizational processes, which enable to achieve business objectives
2. Culture and leadership, collective values and beliefs, which shape attitudes and behaviors related to a process
3. People, units and groups who are on a daily basis responsible for the processes
4. Management, defined accountability and transparency in decision making processes

5. Methods, modes and techniques of supporting the processes
6. Information technology.

According to research conducted in 2009 by service PROCESOWCY.PL within group of 480 people who worked in entities representing different sectors and branches, the process maturity level of large part (38%) of Polish organizations, measured by slightly modified hierarchy CMMI (Capability Maturity Model Integration), is intermediate. It indicates full awareness of processes, which take place in organizations as well as existence of defined measuring system; it does not, however, translate into management decisions. Processes do not bring about answers with regard to realization of strategic objectives. Only 7% of entities consciously identified, measured and managed their processes. 19% of scrutinized entities belonged to public sector, their process maturity level was assessed as below Polish average. Within group of public sector units there was not a single one that would consciously identify, measure and manage its processes; in these entities processes were at most identified (PROCESOWCY.PL).

Similar research is being carried out by C. Wolf and P. Harmon on BPTrends (Wolf and Harmon, 2012, p. 17). Since 2005, every two years, they publish reports on current trends in process management in organizations all over the world. The recent report is based on research, which was conducted in 2011 among 399 entities from Europe, America, Australia, New Zealand, Asia and Africa (out of which over 50% was located in Europe and America). This research has shown that over a span of last years the level of process maturity of organizations has been slowly growing. Authors of the report have come to conclusion, however, that more mature picture of organization has been not related to overall growth of level of process maturity, but have been an outcome of strenuous work of several entities (Wolf and Harmon, 2012, p. 17). It is also worth mentioning that more European organizations than American organizations have achieved the highest level of process maturity.

Table 1: Levels of process maturity of organizations at the whole (Wolf and Harmon, 2012, p. 17)

Level of process maturity of organization	2009	2011
1	10%	11%
2	46%	39%
3	24%	25%
4	16%	19%
5	4%	6%

3 PROCESS MANAGEMENT IN PUBLIC SECTOR ORGANIZATIONS AND PROCESS MANAGEMENT IN PRIVATE SECTOR ORGANIZATIONS

R. Tregear and T. Jenkins (2007) identified nine potential differences between process management in public and private sector. They are as follow (Tregear and Jenkins, 2007, p. 1):
− Public interest
− Accountability
− Political Sensitivities

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  – Whole-of-Government Ecosystems
  – Budget cycle complexity
  – Information exchange
  – Regulating Society
  – Machinery of Government
  – Culture.

While some of these factors have been recognized by the authors as conducive to process thinking, the other have been considered a hindrance. There are also factors that are both catalysts and inhibitors of process management: public interest, accountability, whole-of-government ecosystems, budget cycle complexity, regulating society and machinery of government.

Public interest
Public interest, to a greater or lesser extent, is inscribed into mission and vision of public sector organizations. In fact, they were created to realize public interest goals. However, due to complexity of the issue, to measure the degree of realization of these goals is a very difficult task. Likewise it is difficult to define precisely a customer and his needs.

Accountability
Richard Mulgan (2000, pp. 94–95) in his article on comparison of accountability in public and private sector emphasizes that structure of accountability seems to be more rigid in case of public sector. In general, he indicates four elements, which make accountability in two sectors different. In public sector, apart from rigidity, there are constant political pressure and wider scope of accountability; and in case of private sector it is a lack of equivalent of such an institution as parliament.

Political Sensitivities
Accountability of those who take care of management in public sector has both political and organizational dimension, and their work is the focus of interest of public opinion. Even the most efficient manager may loose his job when he is not supported by society.

Whole-of-Government Ecosystems
Close cooperation between many entities for the benefit of public interest is one of the most important determinants for public sector organizations. Yet, to coordinate activities of organizations, which are subject to different, separate legal acts, is an extremely difficult task

Budget cycle complexity
Much more components and determinants have to be taken into account while drafting a budget in public sector entities than in private sector. The budget of public sector entities is one of the most important political, economic and social documents.

Information exchange
Interaction between citizens and public sector organizations has dualistic character. On the one hand, citizen is subject to them (as taxpayer), but on the other hand, they are to serve citizen. The institutions pass on information on governmental politics and programs. One of the most important tasks of government agendas is to create, manage, promote and supply information according to needs of society. It is complicated, however, since the information citizen expects rarely concerns only one entity or/and localization.

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Regulating Society
Governments create regulations, and private sector entities have to act in compliance with them.

Machinery of Government
The scope and impact of changes resulting from electing new government may be much bigger than impact of changes, which result from restructuring, fusion or takeover in private sector organizations

Culture
Typical public sector organization has strictly defined regulations and procedures, established hierarchy, extended decision making process; it is oriented to acting in compliance with regulations and rules, and it is subject more to political than market control. In comparison to private sector entities, public sector organizations are to a lesser extent innovative and oriented to development; they are also more passive with regard to risk. Attitudes and values of public sector employees also significantly differ from attitudes and values of private sector employees. The public sector employees are more altruistic and more willing to engage into activities for the benefit of social development and public interest.

To assess a relative impact of identified differences Kurt Lewin's Force Field Analysis (FFA) technique is used; it enables to understand behaviors by identifying forces, which determine them.

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Table 2: Force Field Analysis (Tregear and Jenkins, 2007, p. 9)

DRIVING FORCES		RESTRAINING FORCES
Public interest:		**Public interest:**
impact of success is much higher		customers harder to identify
'due process' supported by a process view		outcomes, harder to measure
Accountability:		**Accountability:**
risk management supported by process view		intense social and political pressure
transparency supported by process view		monopolistic complacency
more resources to be saved		**Political Sensitivities**
Whole-of-Government Ecosystems	**Change Target** Reach success, ongoing process management in public sector units.	repercussions of failure
WoG approach supported by process view		transparency exposes problems
high profile incident mgt profile centric		broad group of stakeholders
facilitate understanding and consensus		election cycle disruptive
Budget cycle complexity		**Whole-of-Government Ecosystems**
higher potential for efficiency savings		complex, multi-jurisdictional process
Information exchange		admin frameworks are not supportive
higher digital content in service		complex agreements required
regulating society		**Budget cycle complexity**
able to change ragulations		high public visibility
red tappe reduction supported by process view		resource intensive processes
Machinery of Government		focus on cost management, not profit
Forces review of process		well established processes
MoG enhanced by process view		complex, multi-agency processes
		Culture
		more risk averse
		less flexible structures
		less motivation for change
		Machinery of Government
		causes operational discontinuities
		Regulating Society
		highly regulated environment
		may require legislative changes

The most common mistakes related to implementation of process management are as follow (PROCESOWCY.PL):

1. Wrong identification of the process owner or, in fact, lack of the owner; mapping it in a wrong place within structures of organization. Merely 34% of organizations, which have identified their processes have process owners and usually they hold director positions, it results in limited accessibility and in consequence is tantamount to lack of

process ownership
2. Too wide portfolio of processes, which organization wants to manage; implementation from the start apart from the basic process management its derivatives, which should be implemented after some level of process maturity is achieved
3. Wrong order of implementation – 37% of organizations, which have identified their processes admits that works on processes are part of projects of information system implementation. Whereas, it is BPM that should be the point of departure, and measuring of processes and their analysis should decided whether information system should be implemented or not
4. Inefficient system of communication – only 28% of organizations, which have identified their processes, put process documentation in easily accessible place. In consequence, participants have no access to information on current state of affairs and on implemented and future changes.

On the basis of experience of leading public sector entities in Australia one may indicate following keys to success in process management (Heracleous and Johnston, 2009, pp. 373–379):
1. Technology or rather the way we make use of it. The main goal is not to employ advanced technologies to support existing processes, but to use technology strategically thus it brings about benefits, which can not be easily achieved in another way
2. Proactive change, which in its core has innovative organizational culture and awareness of necessity to remain competitive
3. Ongoing and critical exploration of environment in order to find ways to achieve balanced diversity, to implement innovations and to redefine activities.

4   CONSLUSION

Process management in public sector, by changing viewpoint from vertical to horizontal, aims at engaging citizens, both on state and local administration level. Therefore people responsible for management in public sector have to act within network. They also need negotiation and cooperation skills to be able to build and to sustain relationships with citizens, which are based on partnership and to make these relations source of power stemming not from authority, but from cooperation. The examples of inclusion of citizens into the process of governing are, for instance: deliberative democracy, e-democracy, public conversation, participatory budgeting, citizen juries, study circles, focus groups, roundtables, new forms of town meetings, choice work dialogues, cooperative management bodies, and other partnership arrangements (Bingham, O'Leary and Nabatchi, 2005, pp. 54–61).

One shall bear in mind, however, that use of suggested tools is culturally conditioned. Implementation of process management in public sector seems to be more complicated than in private sector. However, given the direction that public sector reforms took in Poland it seems to be inevitable.

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EMPLOYER BRANDING – A HUMAN RESOURCE STRATEGY FOR COMPANIES IN A TURBULENT ENVIRONMENT BASED ON THE EXAMPLE OF NORTHERN AUSTRIA[1]

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ABSTRACT
Human capital is a precondition for regional development and influences, to a great extent, the value or worth of a region. Especially in a turbulent environment, human capital is a key factor to keep a region competitive and innovative. This paper addresses employer branding as a sustainable strategy for companies, located in the border region of Northern Austria, to manage their human resources. The region is characterized by mostly small and medium sized enterprises which increasingly face labour shortage because numerous residents commute to more urban areas. Hence, employer branding contributes to regional development by attracting and retaining qualified people who not only live in the region but are also willing to work there and invest their talent into the development of new and innovative products or services. An empirical study was conducted to gain insight into how precious human capital can be secured in order to reinforce regional development and encounter the labour shortage problem. Interesting information about employers' and employees' values was discovered. Based on the results, companies in the target region require an enhanced human resource strategy in order to be visible for potential employees and to retain existing employees. That is to say, companies that are noticeable and attractive have better chances to entice qualified people which, in turn, positively influences regional development, as people not only live but also work in the region and invest their potential. Talented people not only spur the innovative strength of a company but also determine the success of an organisation. New approaches towards managing human capital and their impact on the target region are presented in this paper.

Keywords: Employer branding, Human capital, Labour shortage, Regional development

1 INTRODUCTION

In the framework of an intercultural European Union Project, a comprehensive cross-border empirical investigation has been carried out. The survey was conducted in order to explore the labour shortage problem in the rural region of Northern Austria. The project 'RegioTalent' focuses on the human capital as the most important resource of a region, regardless if it is a rural or urban region. We suppose that focusing on the human factor is a condition precedent to further develop a region.

The working situation in Northern Austria is characterized by certain issues discussed intensively within the field of work. The main challenges are the lack of skilled workers and

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apprentices and a lack of adequate and transparent working possibilities for young and qualified persons, as well as a high rate of commuters. Approximately 52 % of the employed population commutes outside of one of the four districts on a daily basis (Statistik Austria, 2010).

Based on an extensive literature review, the importance of human capital is stressed by various authors (Mandhanya and Shah, 2010; Moroko and Uncles, 2008). Employer branding offers the organization the possibility to position itself as an attractive employer. It can be used as a strategy to enhance the visibility and noticeability of an employer. This increases the transparency of working opportunities for people who live in the region. In further sequence, this contributes to regional development by motivating persons to not only live in the region but also work there and invest their potential. A prerequisite of successful employer branding is the identification of values on two sides, employer's and employee's. These values have to correspond to each other in order to enable a positive working environment.

2   LITERATURE REVIEW

In today's economy, firms are facing increasing competition to attract suitable employees. Authors emphasize the importance of human resources: *"In today's world employee is a very important aspect in any organization. Maintaining them and retaining them as well as attracting skilled persons are a very important task [..:]"* (Mandhanya and Shah, 2010, p. 44). It is getting more and more important to pursue strategies in order to attract and retain staff due to the fact that markets progressively recognize human capital or the skills, experience and knowledge of employees as sources of value to the company and to its stakeholders (Moroko and Uncles, 2008). Companies are increasingly realizing that human capital is a crucial resource for staying competitive. Hence, organisations have to make efforts to retain and find qualified employees on the labour market. In this context, Wilden et al. state that *"firms need to develop strategies to ensure that their human-resource base remains adequate for the challenge of doing business."* (Wilden, Gudergan and Lings, 2010, p. 56). One of these strategies is to build a strong brand so that people are able to associate specific values with it. Therefore many companies make efforts to strengthen brand management, particularly on product and corporate branding. However, brand management can also be applied in the area of human resource management (Backhaus and Tikoo, 2004) with the overall objective to attract potential employees, so that they immediately recognize and associate certain values with the employer, and to maintain existing employees. Employer branding increases the transparency of available job opportunities. Shah (2011, p. 30) refers to employer branding as a tool that can be used *"to manage the scarce resource called talent"*. Especially in a turbulent economy, when the war for talent is intense, employer branding can be used as a strategy to attract and maintain talents. *"Retaining employees is more important than hiring them, as talented resources have many opportunities available."* (Chhabra and Mishra, 2008, p. 50) Employer branding is not about a bundle of actions, it is first and foremost an applied corporate philosophy. The aim of being an attractive employer for both, current and prospective employees, can only be reached through multidimensional thinking and actions (Stotz and Wedel, 2009).

3   METHOD

As mentioned in the previous chapter, human capital is a key success factor for regions and companies. The purpose of this research is to identify how human capital can be secured in the region of Northern Austria in order to contribute to regional development. Employer

branding is one of various attempts that try to hold and attract human resources. The research questions derived from the aim of research are:

- Which values do people who live in the region have?
- Why do qualified people migrate from the region?
- Which values do employers in the region have?
- What is required to make people stay in the region?
- How can regional employers attract people?

3.1 Research Design

3.1.1 Data Collection

In order to answer the research questions, an empirical interpretative study was carried out by a qualitative research design, the so-called semi-structured interview. *"It typically refers to a context in which the interviewer has a series of questions that are in the general form of an interview schedule but is able to vary the sequence of questions"* (Bryman, 2012, p. 212). Due to great interest regarding the experience and perceptions of the interviewees, a quantitative research method was impossible to use. Accordingly, Bortz and Döring (2006) pointed out that qualitative material contains more details than a measured value. Based on this qualitative technique, subjective perceptions of the interviewees are investigated. For the purpose of this research, 34 face-to-face interviews as well as one focus group were the chosen methods for obtaining the required information. In the course of the face-to-face interviews the so- called laddering technique was applied in order to uncover core values (Reynolds and Gutman, 1988).

3.1.2 Sample Determination

The respondents were chosen on the judgment of the researchers based on the strengths of the respondents' experience of the phenomenon under study (Collis and Hussey, 2009). The respondents are either living or working in the region of Northern Austria. The participants were selected by using a purposeful sampling strategy (Patton, 2002). The interviewees were selected through the use of personal references of peers and according to their regional belonging to the target region. This sampling method does not entail costs and it is convenient and quick (Malhotra and Birks, 2007). Due to subjective sampling, it does not allow direct generalisations to a specific group. However, it allows exemplary generalisations (Wahl et al., 1982, p. 206; referenced by Bortz, Döring, 2006, p. 335).

Table 1: Description of respondents (own illustration)

Target groups / Respondents	
Face-to-face interviews	
Entrepreneurs (SME's up to large-scale, sectors involved: information systems and engineering, metal, handcraft, production of textile, windows)	12
Talents (pupils, students, apprentices, employees, artists)	12
Inhabitants of Northern Austria	7
Representatives of the region Northern Austria (mayors)	3
	34
Focus Group	
Young People (pupils, students, employees aged from 17-28)	12
Total Respondents	46

3.1.3 Data Processing


```
Constructing of category system
              ↓
Conducting face-to-face interviews and focus group
              ↓
Raw data (transcripts)
              ↓
Reading through all data
              ↓
Extracting information and coding data
              ↓
Preparation and Analysis
              ↓
Evaluation
              ↓
Interpretation
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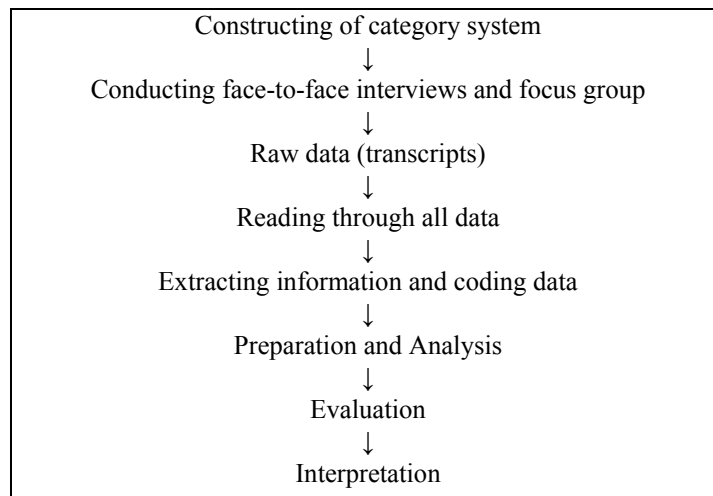
Figure 1: Analysis of data (modified from Gläser and Laudel, 2006, p. 42/194)

The qualitative data collection methods generated texts, such as documents and interview transcripts. These texts are the raw data that were analysed. In contrast to quantitative methods, the texts are diffuse because it is not clear yet which information of the texts is relevant for the study (Gläser and Laudel, 2006). Also Robson (1993, p. 370) observed this challenge that there is *"no clear and accepted set of conventions for analysis corresponding to those observed with quantitative data."*

The qualitative content analysis by Mayring, described in Gläser and Laudel (2006), was chosen as the method for analysing the generated data. The texts were analysed by extracting information in a systematic procedure. For that purpose, the texts were scanned with an

analysis grid for relevant information. Relevant parts of the texts were then allocated to the analysis grid and were independently processed further. This qualitative analysis method did not take the entire texts of the interviews into account; it merely extracted the relevant information. The analysis grid was defined beforehand, meaning that the categories, in which extracts of the texts were allocated to, had been developed ex ante. Such a category or code could be a keyword or a numerical sequence.

The qualitative data and content analysis software MaxQDA was used for data processing as it facilitates a structured qualitative analysis of the transcripts. First, the pre-defined category system was imported into the programme. Then, extracts of the texts were added into the categories and were thus coded. The purpose of coding the data and the preparation of the data should improve the quality by summarising scattered information and eliminating redundancies (Gläser and Laudel, 2006). The aim of the evaluation of the data was to answer the posed research questions and to identify causal relationships.

4   RESULTS AND MAIN FINDINGS

All in all, six propositions were formulated based on the evaluation and interpretation of the collected data. These propositions provide insight into the situation in the target region and contribute to answering the research questions.

The main results and findings of the qualitative survey show the importance and meaning of the close connection of employment and quality of living. The satisfaction with the employment situation of the inhabitants of Northern Austria is closely related to the assessment of the quality of living. It is significant, that employers and entrepreneurs are aware of this connection in order to be able to attract, satisfy, and bond the human capital. Moreover, appropriate job opportunities in the region are an important factor for bonding inhabitants, in particular young people and creative potential to the region. Besides the working situation, social contacts and family, habitation and spare time are factors influencing the perception of quality of living – it is the sum of these influencing aspects that hold people in a certain region. From the perspective of regional development and the development of rural regions, particularly the possibility for people to work in the region is decisive.

Proposition 1: "Regional work is a major factor of the subjective perception of the quality of living and thereby the quality of work is important."

The main result from the gathered data is that regional work is a major factor of the subjective perception of the quality of living and thereby the quality of work (that is to say, challenging content, career opportunities, training and qualification and remuneration) is important. In this context, Csikszentmihalyi states that *"involvement in interesting activities, including engaging work, is a major source of well-being"* (Myers and Diener, 1995, pp. 15–16).

Regional working opportunities and jobs enhance the quality of living and enable people who live there to stay in the region. According to the respondents, there is a direct connection between the quality of living and having a job in the region. It has to be considered that, besides the regional aspect, the requirements regarding working conditions are multilayer and therefore the survey additionally investigated the main values of employees, which will be discussed in a subsequent section.

Nevertheless, the company structure in the investigated region consists mainly of small and medium sized enterprises which cannot supply the demand for regional work. Thus, commuting seems to be the most obvious alternative. According to Florida (2008), commuting is the one thing which makes us most unhappy in life. Interpersonal relationships (family, friends), a high quality of living (nature, infrastructure), and regional job opportunities are those things which raise our feeling of well-being, trusting the results of the available qualitative survey.

Proposition 2: "Employer Branding is of high importance for regional and localentrepreneurs in order to be visible in the labour market and to attract (regional) workforce."

Derived from the qualitative data, employer branding and talent management are of high importance, particularly in remote rural areas. There are special conditions for entrepreneurship in rural regions as they seek for a skilled and specialized labour force. One main advantage of firms in rural areas is that they use small and medium sized structures and thereby foster trust in their customers. Enterprises in urban areas can learn from enterprises in rural areas in the framework of the information society, where anonymity in business is common.

According to the results of this empirical investigation, the commuting behaviour which is at a very high level results not only from missing regional job opportunities but also from the ignorance of actually having available job options. Ignorance exists on both sides, employees as well as employers. Asking graduates, they often do not even think about searching for regional job opportunities. Besides, employers do not see any need to be present in the regional job market. They think it is sufficient to announce the job as the need arises but do not invest in anything in advance. Employer branding in terms of being present on the regional job market, cooperating with local education facilities, and gaining a good reputation, is not always considered to be important. These companies are more likely to be affected by skill shortages than those who invest in employer branding measures.

4.1 Employer branding in the context of rural and urban areas

Firms in urban areas could use strategies, such as employer branding and talent management as a positive example and tool to attract talents and regional human capital. According to Mandhanya and Shah (2010, p. 43), *"Talent Management refers to the process of developing and integrating new workers, developing and keeping current workers and attracting highly skilled workers for company"*. The definition of 'Employer Branding' by Hochgatterer (2012, p. 24) is: *"Employer branding is the effort of attracting potential employees, retaining current employees and communicating the employer brand internally as well as externally. Employer branding makes it possible to differentiate from competitors and to win the war for the scare resource called talent."*

Proposition 3: "Recruitment strategies in rural regions are different from recruitment strategies in urban regions."

The research identified different approaches of the remote rural areas and urban areas concerning recruitment strategies and measures. Applied and effective recruitment measures observed in the rural area of Northern Austria are in the first place, word of mouth and recommendations by acquaintances. In addition, the close cooperation with schools is

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essential and there is still potential for further expanding and intensifying the cooperation with regional schools and education institutions. Activities related to cooperation with schools could include frequent company visits at regional schools and e.g. give lectures, realize projects together and post job advertisements directly at schools. Furthermore, activities and events, such as an open house, using regional media, sponsoring, and the regional labour market service are well used in rural companies. New media is currently not very commonly applied. A decisive aspect for a successful recruitment process is the image and reputation of the companies and firms in the region and this is where employer branding comes into play.

Firms in remote rural areas establish their own employer branding strategies, especially focusing on regional reputation and early involvement of future employees. Skills shortage is not a problem they have to deal with, as they are known as valuable employers who invest in their innovative potential in terms of personnel development.

Proposition 4: *"Companies that are fostering intrinsic motivation and offering their personnel incentives benefit from a high level of loyalty and are able to find skilled workers and qualified staff."*

Such activities that are fostering intrinsic motivation are, as mentioned by the companies in our study, for instance further education, job rotation, management by objectives, premiums, paying more than the collective contract forces, social events in order to enhance the feeling of solidarity and social cohesion.

The survey revealed that some firms in even very remote rural areas are not affected by a labour shortage problem. These companies have been asked for the reasons, how they manage to find skilled workers and qualified collaborators. The key finding is that these companies apply various employer branding measures. From an internal point of view, organizations offer sufficient training opportunities for employees and apprentices, good working and family atmosphere, and voluntary social contributions. Respondents argue that in their companies trust, appreciation and empathy for employees can be found at all levels. These incentives lead to highly motivated employees and, in turn, enhance the image of the employer brand. Engaged and enthusiastic employees are able to achieve maximum performance and therefore generate better outcomes and results. This again, leads to higher resources that the company can use for social benefits or other employer branding activities. Internal employer branding activities are essential to meet the expectations of existing employees and to keep the 'promise' that was transmitted by external activities beforehand. If employees are satisfied and their expectations are met, it prevents them from switching to the competition and encourages them to communicate their positive experiences with their acquaintances.

4.2 Values of Employers and Employees

In order to implement an employer branding strategy, the values of a firm are of great importance. The compliance of the values of employers and employees is a key factor for finding and holding skilled workers, qualified employees and talents. In the frame of this study, the value systems of entrepreneurs and employees have been investigated by asking each of them the following questions:
- What is important for you related to WORK?
- What is important for you related to LIFE and LIVING as a whole?
- What is important for you related to the REGION you live in?

According to the Laddering Technique (Reynolds, Gutman, 1988), after asking one of these questions the interviewer has to ask three times, why the mentioned answer is important for the person. The laddering technique which has been applied in this study is a research interview technique for uncovering core values.

4.2.1 The employee's perspective

The most frequently mentioned answers regarding the personal values of the interviewed employees are:

- Having sole responsibility, working independently
- Room to maneuver and scope for development
- Advancement in one's position and career perspectives
- Flexibility concerning working time and scheduling
- Flexibility concerning work content (interesting and challenging)
- Working atmosphere (relation to colleagues, seniors, working environment)
- Creativity, challenge, manifoldness, job variation
- Continuing education and lifelong learning
- Pleasure and enjoyment with work

Respondents stressed that values, such as creativity and room to maneuver contribute to their individual fulfillment. These findings are in line with a statement of Bergmann, that *"the spirit and sense of one's activities, a job which we absolutely want to have, is better than any kind of therapy"* (Bergmann, 2004, p. 119). According to the respondents, the main point is the mixture between the adequate work content, the working atmosphere and appropriate rewards.

4.2.2 The employer's perspective

From the employer's point of view, the values that were commonly mentioned by employers and entrepreneurs in the region of Northern Austria are:

- Quality of products and processes as success factors
- Honesty and fair-mindedness, reliability, trustworthiness, gentlemen's agreement
- Sense of cooperation and fairness
- Sense of community: solidarity, social cohesion and team spirit
- Societal and social responsibility, socially mindedness
- A climate of appreciation and respect in the company and working groups

Moreover, the values of employers related to human capital management and the leadership of employees have been explored:

- Participation, involvement and information (regarding working processes and assignment of tasks)
- Clarity and transparency concerning processes, course of action systems and remuneration
- Openness related to communication, distinctive orientation
- Appreciation, recognition and respect of personnel
- Further education and qualification, lifelong learning, human capital development, fostering talents and personnel development
- Career development and future perspectives
- Leadership and management: management by objectives, teambuilding, workplace design

- Offering challenge, manifoldness and job variation

Regional work is the key for regional and economic development and innovation of sustainable regions. Therefore, in order to attract and hold regional workforce, it is crucial for local entrepreneurs and employers to focus on meeting the expectations of the employees regarding the values of career advancement possibilities, flexibility, continuing education, working atmosphere and reward.

4.3 Overcome challenges of the future

Proposition 5: "New forms and concepts of work will be required in order to meet the challenges of the future."

Another important result is that the term 'work' has to be reconsidered and new concepts and forms of work will be required in order to meet the challenges of the future, e.g. tele-working, qualification in firms, life-cycle-oriented work models allow more flexibility and self-determination. Flexibility in working time will become more important in the future and there will also be a need for more flexibility in terms of working forms, especially considering the situation of families with a duty of childcare and well-established employees. There is a huge potential of creativity drowsing in women, who stay at home due to childcare. To summarize, new models of work should be considered as for instance life-cycle-oriented work models for women, as well as for men taking into account the private, family situation and age.

Proposition 6: "In addition to regional work, regional education and training, infrastructure and habitation are essential in order to bond and keep skilled workforce and in particular, young talents."

Supplementary to regional job opportunities, increasing the quality of living, regional education and training is one more factor making life interesting for people in Northern Austria. Especially young respondents highlight that sufficient infrastructure and appropriate habitation is essential and contributes to their quality of life. Infrastructure pertains to adequate public transport, in order to guarantee mobility, and notably different locations for young people to meet each other, entertainment opportunities, cultural events and sport options. In addition, for the respondents, adequate and affordable habitation possibilities in rural regions are fundamental for the decision of the place of residence, especially for young people.

5   IMPACT OF RESULTS ON REGIONAL AND SOCIAL DEVELOPMENT

Regional job opportunities are the decisive factor for bonding people, especially young talented people, to the region. The settlement of companies and entrepreneurship has to be fostered, also taking into account the regional requirements and the support of small and traditional structures. Furthermore, applying employer branding measures, such as incentives for existing employees as well as external activities for being noticeable for potential employees, will strengthen companies in the region. Especially for small and medium sized enterprises (SMEs) employer branding can be the key strategy to attract and bond qualified staff. These small structured companies in Northern Austria do not have a separate human resource department and therefore might not apply employer branding measures. However, employer branding strategies do not implicitly require big budgets; truly living the values that are promised externally to potential candidates is important. Additionally, new forms of work and the cooperation of local companies and schools in order to merge employers and

employees will contribute to enhance the situation of Northern Austria. In addition to working opportunities, education and training opportunities are required in the region.

6   CONSLUSION

The study has revealed that regional job opportunities influence and enhance the quality of living. Therefore, it is advisable for companies in Northern Austria to apply employer branding measures as this increases the visibility of local companies, especially in remote rural areas. This encounters the migration of local people and talents as they are given the possibility to recognize local job opportunities. Furthermore, we detected differences in the recruitment strategies of urban and rural companies. In rural areas word of mouth recommendations are widely used to learn about an employer. Regarding employer branding, it is crucial that the values of employees and employers correspond with each other. The values have to be an honest representation of what the employer stands for. This enables the employees to identify whether these values match his or her expectations.

7   LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

The research findings are restricted to a specific region, namely the area of Northern Austria. Hence, the results from the qualitative research are not representative for the population. According to Bryman (2012), the findings of qualitative research are to generalize the theory but not the population. It is the quality of the theoretical inferences that are made out of qualitative data that is crucial to the assessment of generalization (Bryman, 2012). This view of generalization is called "analytical generalisation" by Yin (2009).

Further research concerning the regional employer branding strategies and measures in the region of Northern Austria will be applied by performing scientific case studies with local companies.

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THE EFFECT OF EMPLOYEE'S COMMITMENTS ON CUSTOMER'S LOYALTY BASED ON TRANSACTION COST

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ABSTRACT
Few researchers, such as Hansen, Sandvick and Selnes (2003) and Jones, Taylor and Bansal (2008), have mentioned about the effect of employee's commitments and individual commitment on consumer's loyalty for products. This study aims to integrate the organizational commitment provided by Hansen, Sandvik and Selnes (2003) with the affective commitment and the calculative commitment presented by Jones et al. (2008) to explore the three types of commitments which affect customer's loyalty to the providers. Individual commitment, employee commitment, affective commitment and calculative commitment are selected as research variables. The research attempts to understand the factors and the effects of different commitments on consumer's loyalty and consumer's willing to continue consumptions under the agent's services from the different insurance companies. The 300 consumers serviced by insurance agents are selected as research samples. The research method is applied questionnaires analyzed by multiple Hierarchical Regression analysis. The research results show that employee's commitments and individual commitments positively influence the calculative commitment and the affective commitment which affect consumer's loyalty. Transaction cost does not have positive effect on consumer's loyalty.

Keywords: *Affective commitment, Calculative commitment, Employee commitment, Personal commitment, Transaction costs*

1 INTRODUCTION

According to national policy to push forward insurance policies, many people have experiences to interact with insurance agents for transportation or medicare insurances because of risks increase in the living environments. The interaction relationship between agents and customers may influence customer's interest and rights. Therefore, this study aims to explore the influential factors which will affect customer's intentions of consumption or commitments to continue accepting services from the same agents or the different agents to maintain their insurance interests.

Relationship marketing is currently one of research important subjects in the marketing field aiming to build, develop and maintain the mutual interest relationship between transaction parties (Morgan and Hunt, 1994). In fact, customer's intention to stay with the same agent is easily shaked at the high competitive financial market. Customers change their retention according the insurance interests provided by insurance agents; therefore, those who offer better insurance plans they keep relationship with them. The key point for financial businesses to maintain competitive abilities is to keep good and trustworthy long relationship with customers; that is, the commitments from consumers to keep with insurance agents is influential factor for insurance providers to retain competition in the financial market.

Commitment (desire to keep the important relationship) is seen as a relationship established in market (Moorman, Zaltman and Desphande, 1992). Commitment, generally described as a desire to maintain a valued relationship (e.g., Moorman et al., 1992), is recognized as one of the building blocks of relationship marketing (Palmatier et al., 2006). Therefore, commitment as a research indicator can be found in the different forms and dimensions (Meyer, Becker and Vandenberghe, 2004). According to researches studied by Jones et al. (2008), commitment as an indicator has two different perspectives, from the perspective of existence it can be divided into two relationships: between consumers and service organization and between consumers and individual employee; from the perspective of role application it means business friendship. Therefore, both relationships exist in the internal one between customers and employees, and the external relationship of service provides, for example friendship. Further, based on the existence perspective Jones et al. (2008) divided commitment into three indicators as organizational commitment, employee commitment and individual commitment based on essence (organization to employee) and role (service provider to friendship). According to the perspective of role application, added value is proved as friendship between service providers and customers which can increase towards the loyalty of service organization. Further, Hansen et al. (2003) divided organizational commitments into affective commitment and calculative commitment with the interactions between service employees and companies. Therefore, Jones, Reynolds, Mothersbaugh and Beatty (2007) also distinguished affective commitments with calculative commitments; therefore, the former one to stay is to want because of the internal desire; the latter one to stay is necessary based on the certain consideration.

At the past time, the researches related to employee and individual commitments are rare (Jones et al., 2008), but both commitments are important for customer's willing to stay with service providers. Organizational commitment is divided as affective commitment and calculative commitment provided by Hansen et al. (2003). Jones et al. (2008) provided organizational, employee and individual commitments. This research aims to integrate the commitments provided by Hansen et al. (2003) with three commitments provided by Jones et al. (2008) through the concept of transaction costs as interfered variable proposed by Jones et al (2007). The purposes of the study are (1) to explore the effects of employee's and individual's commitments on emotional and calculative commitments, and (2) to examine the effects of emotional and calculative commitments on customer's loyalty to maintain consumption; (3)finally to explore the interfering effects of transaction costs concerning affective and calculative commitments on consumer's loyalty to continue consumption. The research method applies multiple Hierarchical Regression analysis. 300 customers serviced by insurance providers are selected as the research samples in order to explore customer's loyalty to stay with their insurance agents.

This research is a quantitative study. This study proceeds as follows: Section Two reviews the theoretical arguments and some existing findings related to affective, calculative and individual commitments, and loyalty. Section Three illustrates the research design, including research model and hypotheses, research methods (i.e. sampling and measurement). Section Four presents the data analyses and hypotheses testing results. Section Five discusses our research findings, and finally, Section Six draws conclusions and provides suggestions to maintain loyalty between consumers and agents.

Enterprise in Turbulent Environment

2 THEORETICAL BACKGROUND

Consumer's intention to stay is seen as the same dimension as consumer's loyalty, re-consumption or behavior. Jones, Mothersbaugh and Beatty (2000) used re-patronage behavior or intentions to study consumer's decisions to continue or terminate credit card membership. Consumer's intention to stay is often mentioned regarding the relationships between buyers and sellers aimed to keep current consumers, but not new consumers (Harley, 1984; Crosby, Evans and Cowles, 1990). As Ajzen and Fishbein's (1980) studies, good quality services, concern with consumer's demand and good prices for consumers are helpful to solidify the relationships between consumers and service providers. According to the mentioned researches, intention of patronage is easier than factual behavior to evaluate and study; therefore, many researches, such as Garbarino and Johnson (1999), Zeithaml, Berry and Parasuraman (1996), applied the intention to re-patronage to study consumer's intention to stay. Bolton et al. (2000) and Gerpott et al. (2001) defined the intention to stay as consumer's intention to re-patronize or re-buy certain products or services. This study uses the concept of intention to stay as one of research variables provided by Bolton et al. (2000) and Gerpott et al. (2001).

In addition, commitment is an influential factor to maintain mutual relationship and long-term interests. Commitment is an intention including promise, pledge and undertaking (Dwyer, Robert and Schurr, 1987). Moorman et al. (1992, p. 316) defined commitment as a continuous desire to keep important relationship. Relational commitment is meant trading partners, that is, it is essential to keep continuous relationship (Morgan and Hunt, 1994, p. 23). Garbarino and Johnson (1999, p. 73) perceived commitment as consumer's feeling, loyalty, concern with welfare and identity. Geyskens, Steenkamp, Scheer and Kumar (1996) divided commitment into two factors: affective commitment and calculative commitment, both are stable attitude and belief, but both motivations to keep relationship are different; the former illustrates the existence of joy and belonging to provide intention to maintain the relationship; the latter expresses to recognize the costs of termination and transaction when removing the relationship, therefore, to keep relationship is necessary. Dwyer et al. (1987) perceived the concept of commitments as absolute, clear and definite promise between trading partners. Brown et al. (1995) provided instrumental commitment and normative commitment, and Geyskens et al. (1996) used calculative commitment and affective commitment. Gilliland and Bello (2002) provided calculative commitment and loyalty commitment to explain the relationships between two partners. In this study, calculative and affective commitments are applied as research variables illustrated as follows:

(1) The relationship between affective commitments and the intention to stay.

Konovsky and Cropanzano (1991) provided that the relationships between consumers having consumption commitment and trading partners existed positive and closed affective relationships. The company having affective commitments possesses enterprise philosophy, goal and the sense of value, which have produced the perception of unity (Kim and Frazier, 1997a), and the emotional connection, then these perception and connection make both partners want to continue cooperation (Allen and Meyer, 1990; Meyer and Allen, 1991). In the relationship of distributions, affective commitment is overlapped with calculative commitment. Both have the element of continuous relationships existed at the same time, but both commitments are made by different factors (Gilliland and Bello, 2002). Bansal et al. (2004) provided affective commitment influenced by satisfaction and trust, and calculative commitment influenced by transaction costs and the choice of partners. If consumers have high affective commitments towards service companies which make them to keep the relationship and the intention to stay with companies. This commitment, excluding the evaluations of instrumental cost and benefit, develops from happy relationship and

cooperation partnership. Therefore, affective commitment in any dimension trend to keep status quo (Mathieu and Zajac, 1990; Kumar et al., 1994; Wieselquist et al., 1999), therefore; commitment is a kind of positive behavior. Selnes and Gronhaug (2000) found that affection and providers have mutual influences which make consumers have higher intentions to keep relationships and to stay in organizations, further to share their experiences with others. According to the findings done by Hansen et al. (2003), affective commitment has positive influence on consumer's intentions to stay. Therefore, affective commitment is chosen as research variable in this study.

(2) The relationship between calculative commitments and the intention to stay

The power of partners having calculative commitments to maintain cooperation comes from the consideration of economic dimensions, such as interests or costs (Allen and Meyer, 1990; Meyer and Allen, 1991). If terminating cooperation, the interests are scarified which caused loss (Brown et al., 1995; Geyskens et al., 1996; Gilliland and Bello, 2002); therefore, under considering the interests, it needs to continue cooperation (Kim and Frazier, 1997b; Meyer and Allen, 1991). Calculative commitments belong to rational and assignable orientation; that is, in calculating the interests with continuous relationship and loss because of the termination of relationship, the practical perception of commitment is generated; moreover, calculative commitment is a promise afer rational and economic calculation (Brown et al., 1995; Gilliland and Bello, 2002). Calculative commitment has the element of continuous relationship, but this commitment has positive relationship with opportunistic behaviors, and also has positive relationship with other provider's cooperation. If other providers can offer better economic conditions, the retails are willing to terminate current cooperation with the current provider (Gilliland and Bello, 2002). Therefore, according to the mentioned, calculative commitment is chosen as a research variable.

3   RESEARCH DESIGN

3.1   Research Variables and Research Structure

According to literature reviews, the research focuses on eight dimensions: affective commitment, calculative commitment, process transaction cost, social transaction cost, loss interest cost, employee commitment, individual commitment and the intention to stay which construct the research structure as figure 1. The research regarding the intention to stay applies Hansen et al. (2003) study to divide commitments into affective commitment and calculative commitment to explore the effect of service employee on the intention to stay, and the evaluation questions are referred the scale provided by Allen and Meyer (1990) and Kumar et al. (1994). Jones et al. (2007) offered transaction cost as interfered variable to explore the affect of affective and calculative promises on the relationships among process transaction cost, social transaction cost and loss interest cost. The questions regarding transaction costs are refereed by Anderson and Gerbing's (1988). Finally, Jones et al. (2008) and Anderson and Narus (1990) provided the scale regarding organizational commitment, and the scale concerning service loyalty done by Jones et al. (2007) are used as two research dimensions: employee's commitment and individual commitment.

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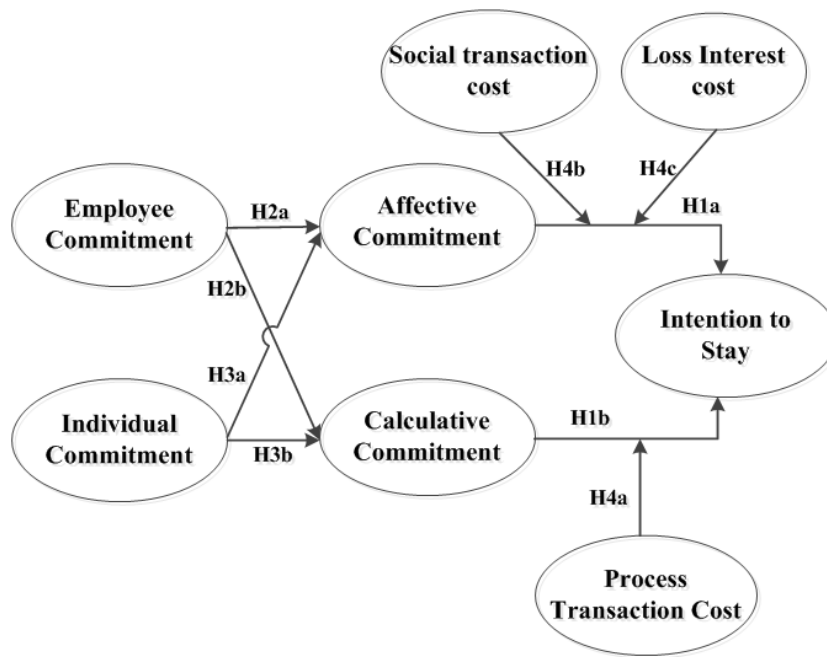
Figure 1: Research structure

According to the above mentioned literature and research structure, the research hypotheses in this study are as Table 1.

Table 1: Research Hypotheses

H_{1a}：Affective commitment positively influences consumer's intention to stay.
H_{1b}：Calculative commitment positively influences consumer's intention to stay.
H_{2a}：Employee's commitment positively influences affective commitment.
H_{2b}：Employee's commitment positively influences calculative commitment.
H_{3a}：Individual commitment positively influences affective commitment.
H_{3b}：Individual commitment positively influences calculative commitment.
H_{4a}：Process transaction cost interferes in calculative commitment with the relationship of the intention to stay; that is, under high process transaction cost, calculative commitment reduces the influence on the intention to stay.
H_{4b}：Social transaction cost interferes in affective commitment with the relationship of the intention to stay; that is, under high social transaction cost, affective commitment reduces the influence on the intention to stay.
H_{4c}：Loss interest cost interferes in affective commitment with the relationship of the intention to stay; that is, under high loss interest cost, affective commitment reduces the influence on the intention to stay.

3.2 Research Sampling and Questionnaire

Consumers who have accepted services provided by insurance agents are chosen as the research sample. By referred to the research samples (220~484 people) chosen by Jones et al. (2008), Jones et al. (2007) and Hansen et al. (2003), this study sent 300 questionnaires to respondents from December 2010 to May 2011. As the questionnaires from 34 respondents were excluded for being incomplete, there were only 266 valid samples, which comprised

88% of all respondents. Participants were asked to respond to three dimensions using a 5-point Likert scale from 1 (agree strongly) to 5 (disagree strongly).

Questionnaire is divided into four parts: the first part explores employee and individual commitments according to organizational scale done by Anderson and Narus (1990) and the scale of service loyalty provided by Jones et al. (2007). The second part examines the relationship between different commitments (including affective and calculative commitments) and the intention to stay according to the scale done by Allen and Meyer (1990) and Kumar et al. (1994). The third part studies the relationships between different commitments (affective and calculative commitments) interfered by transaction cost and the intention to stay upon the scale provided by Anderson and Gerbing (1988). Finally, the fourth part is related to personal data such as gender, age. The research method is applied questionnaires analyzed by multiple Hierarchical Regression analysis via SPSS 12.0.

4   RESERCH ANALYSIS

According to the analysis of the respondent demographic data, 50.60% of the respondents were female. Nearly 48% of the respondents were less than 30 years old. Around 56% of the participants were unmarried. 38% of the participants were civil servant and teachers. Around 74% of the respondents had bachelor degree. In addition, 46% of the participant's salaries were yearly 1356~3390 (USD). 34.50% of the respondents have contacted with insurance agents less than 4 years.

Cuieford (1965) provided the value evaluation of Cronbach's α. If the value of Cronbach's α is higher than 0.70, then, the reliability is highly accepted (Cronbach's $\alpha \geqq 0.70$). In this research, except the dimension of employee's commitment and the intention to stay (Cronbach's $\alpha \leq 0.62$), all items remaining on the questionnaire have a value of Cronbach's alpha greater than .70., including transaction cost (Cronbach's $\alpha \geqq 0.70$). Therefore, the reliability of the research is accordance with Cuieford's (1965) evaluation.

The research results are analyzed by multiple Hierarchical Regression analysis via SPSS 12.0, illustrated as follows.

4.1   Affective commitment

Employee commitment to the intention to stay is analyzed by Regression analysis. According to Model 1, employee commitment significantly and positively influences the intention to stay (R^2=29.80%; F=112.76; $P \leq 0.001$; β=0.55). From Model 2--employee commitment to affective commitments, employee commitment has significant and positive effect on affective commitment (R^2=34.60%; F=140.37; $P \leq 0.001$; β=0.59), thus, H$_{2a}$ is supported. From Model 3, employee commitment significantly and positively influences the intention to stay via affective commitment as the medium (R^2=34%; F=67.98; employee commitment β=0.40; $P \leq 0.001$; affective commitment β=0.25; $P \leq 0.001$). Meanwhile, affective commitment positively and significantly influences consumer's intention to stay; thus, H$_{1a}$ is supported.

As the results of individual commitment to the intention to stay shown in Model 1, individual commitment significantly and positively influence consumer's intention to stay (R^2=36.40%; F=151.65; $P \leq 0.001$; β=0.6.30). As shown in model 2 individual commitment to affective commitment, individual commitment has significant and positive effect on affective commitment (R^2=39%; F=169.13; $P \leq 0.001$; β=0.62); thus, H$_{3a}$ is supported. As shown in

Model 3, via affective commitment as the medium individual commitment has significant and positive effect on consumer's intention to stay, that is, affective commitment positively and significantly influences consumer's intention to stay (R^2=38.40%; F=10.31; individual commitment β=0.18; $P \leq 0.01$; affective commitment β=0.49，$P \leq 0.001$); thus, affective commitment is an effective medium for individual commitment to consumer's intention to stay.

4.2 Calculative commitments

By employee commitment to the intention to stay in Model 1, employee commitment has significant and positive effect on consumer's intention to stay (R^2=29.60%; F=112.76; $P \leq 0.001$; β=0.55). In Model 2, employee commitment significantly and positively influences calculative commitment (R^2=6.50%; F=18.31; $p \leq 0.001$; β=0.25); thus, H_{2b} is supported. As shown in Model 3, employee commitment via calculative commitment has significant and positive effect on consumer's intention to stay (R^2=30.60%; F=59.71; employee and calculative commitment β=058 & β=0.12, respectively, $P \leq 0.001$); thus, H_{1b} is supported.

According to individual commitment to consumer's intention to stay shown in Model 1, individual commitment has significant and positive effect on consumer's intention to stay (R^2=36.40%; F=151.65; $P \leq 0.001$; β=0.63). Based on individual commitment to calculative commitment in Model 2, individual commitment positively and significantly influences calculative commitment (R^2=7.90%; F=18.31; $P \leq 0.001$; β=0.18); thus, H_{3b} is supported. Individual commitment via calculative commitment does not have positive effect on consumer's intention to stay (R^2=5.50%; F=5.80; individual commitment and calculative commitment β=0.43 & β=0.08, respectively; $P \leq 0.001$ & $P<0.05$, respectively).

4.3 Transaction cost as interfered variable

The research applies multiple Hierarchical Regression analysis to test interfere variable (Kleimbaum, Kupper & Muller, 1998). In Regression Models, the independent variables in Model 1 including affective commitment, calculative commitment, social transaction cost, loss interest cost and process transition cost respectively and positively influences consumer's intention to stay (β=0.27, β=-0.03, β=0.13, β=0.17, β=0.36, respectively; $P \leq 0.001$, $P \geq 0.613$, $P \leq 0.05$, $P \leq 0.01$, $P \leq 0.001$, respectively); meanwhile, explanatory variables of this model is 45.60% and F=43.701(R^2=0.46; F=46.70). After testing Model 2 based on the effect of interaction, H_{4a}, H_{4b} and H_{4c} are rejected, illustrated as Table 2.

Table 2: The results of Research Hypotheses

Hypotheses	Items	Results
H_{1a}	Affective commitment positively influences consumer's intention to stay.	Supported
H_{1b}	Calculative commitment positively influences consumer's intention to stay.	Supported
H_{2a}	Employee's commitment positively influences affective commitment.	Supported
H_{2b}	Employee's commitment positively influences calculative commitment.	Supported
H_{3a}	Individual commitment positively influences affective commitment.	Supported
H_{3b}	Individual commitment positively influences calculative commitment.	Supported
H_{4a}	Process transaction cost interferes in calculative commitment with the relationship of the intention to stay; that is, under high process transaction cost, calculative commitment reduces the influence on the intention to stay.	Rejected
H_{4b}	Social transaction cost interferes in affective commitment with the relationship of the intention to stay; that is, under high social transaction cost, affective commitment reduces the influence on the intention to stay.	Rejected
H_{4c}	Loss interest cost interferes in affective commitment with the relationship of the intention to stay; that is, under high loss interest cost, affective commitment reduces the influence on the intention to stay.	Rejected

5   CONCLUSIONS

Through calculative commitment as a medium, employee commitment and individual commitment positively influences consumer's intention to stay. In addition, calculative commitment plays an important role and strengthens influence on consumer's intention to stay. Calculative commitment positively influences consumer's intention to stay. Under high calculative commitment, consumers choose to continue staying with agents because of reciprocal relationships.

Through affective commitment as a medium, employee commitment and individual commitment positively influences consumer's intention to stay. With high affective commitment, consumers are willing to continue staying because of trust between both parties. Employee and individual commitment have significant and positive effect on calculative and affective commitment, that is, the relationship that consumers have long cooperation with insurance agents positively influences consumer's strong belonging to insurance agents. Therefore, through affective and calculative commitments as mediums, consumers treat insurance agents as cooperative parties or friends or long-term partners. Their relationships influence consumer's intention to stay because of calculative and affective commitments. Moreover, consumers decide to continue services because of insurance agents as friends, even though the service cost is increased.

In sum, employee commitment assists to strengthen organizational commitment. Higher

individual commitment is helpful to build consumer's commitment towards organizations. The effect of employee commitment on organizational commitment means that the company should pay attentions on the cultivation of employee commitments. Employees have to recognize consumer's demands and remember their names; further, when providing services, they have commitment and trust for each other.

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EFFICIENCY OF CORPORATE INTERNATIONAL DIVERISIFICATION: EVIDENCE FROM DEVELOPING COUNTRIES

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ABSTRACT
During the last two decades corporate international diversification became a widely used growth strategy. However, the majority of scientific researches insist on its value-destroying pattern. Those of them which were based on accounting studies' methodology and used current performance measures are likely to make an incomplete evaluation of corporate performance by accounting either for operating performance or financial (cost of capital) effects of internationalization. The current paper proposes a new approach for estimation of internalization-performance relationship which is based on economic profit concept. It allows to control simultaneously both operating and financial effects of internationalization on the firms' current performance. The proposed model has been empirically tested on a sample of large companies from one of emerging economies - Russia. The results identify a non-linear U-shape relationship between a degree of internationalization and companies' residual income (economic profit). The relationship is mainly determined by operating performance effects on economic profit while cost of capital has a modest effect. Overall for the majority of companies international diversification refers to decrease in economic profit. The results are compared against the Q-Tobin measure which incorporates expectations about future performance. A joint analysis of current performance (economic profit) and long-term performance (Q-Tobin) allows to expect the internationalization benefits to be realized in future. As an implication of the present research for corporate decision makers it may be stated that at the initial level of international diversification the internationalization decisions should be made with a high degree of caution. There should be a clear internationalization strategy based on definite mechanisms of performance improvement. The prestige and other irrational motives which may lead to the value destruction should be pruned.

Keywords: *Corporate international diversification, Corporate performance, Internationalization, Multinational corporations, Residual income*

1   INTRODUCTION

During the last two decades the level of corporate international diversification (CID) has been significantly growing. As an example in 2003–2006 a number of cross-border M&A deals grew by 40% per annum in manufacturing industries of some of European countries (Coeurdacier et al., 2009). In recent years the companies from emerging markets have also enhanced internationalization strategies, e.g. in China outbound M&A activities have doubled in terms of annual number of deals and increased five times in terms of value in period from 2002 to 2005 (Tan and Ai, 2010). In year 2000–2007 an average growth rate of outbound foreign direct investments of Russian companies was about 40% per annum (Plotnikov, 2010).

According to the majority of researches on performance of cross-border diversification the companies get into the internationalization paradox - the scholars demonstrate that the internationalization activities are mainly value-destroying.

Under corporate international diversification (CID) we mean an intensification of international activity of a company in terms of either exporting the products to foreign markets or employing resourced and allocating production units abroad or both. Following Hitt et al. (2006) the terms international diversification, cross-border diversification and internationalization are used in the paper as synonyms.

In fact most part of the researches which are based on accounting studies' methodology use operating performance measures (such as operating profit margin, return on assets or return on equity) and are missing the financial-side effects which are mainly resulted in the change of the cost of capital. These financial effects are mostly related to change in overall level of risks, access to integrated (global) capital markets, tax optimization and change in capital structure (Singh Manohar and Najadmalayeri Ali, 2004). Thus a neglect of these financial effects may lead to an incomplete evaluation of current performance[1] of internationalization. Both financial and operational effects should be analysed in order to fix the impact of internationalization on current performance. Meanwhile the current performance of internationalization may not represent its' long-term performance. Thus the current performance of internationalization should be compared to long-term measures such as Q-Tobin or market multiples which incorporate market expectations on future performance of a firm.

This paper contributes to the existing literature by developing a new approach for evaluation of internationalization-performance relationship which is based on a concept of economic profit (residual income). The method allows us to control both operating and financial effects of internationalization. Our second contribution is derived from the application of our original model to empirical identification of internationalization-performance relationship of the firms from the emerging capital markets, mainly Russian companies, which still remained unexplored as compared to the developed markets.

The paper is structured as follows: in the next section the theoretical background is summarized on the basis of existing researches and the hypotheses are formulated. The data and the methods are explained in section three. In section four we discuss the empirical results. Finally, the overall conclusions and policy implications are presented.

2 THEORETICAL BACKGROUND AND HYPOTHESES

2.1 Research approach

The internationalization-performance relationship is typically studied in two paradigms[2]: event studies and accounting studies. While the first is based on the analysis of corporate performance change within a time window around a cross-border M&A deal, the second approach is based on identification of relationship between corporate performance (typically accounting-based measures) and a degree of internationalization of business (DOI). One may

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[1] Under current performance we mean the results of a firm in a particular time period, for example for a particular year

[2] There exists the third paradigm of case studies analysis, but it remains a rather niche study-field.

find a thorough review of research literature of both event-based and accounting-based internationalization studies in the papers of Bruener (2004) or Hitt et al. (2006).

The current research is based on the approach of regression analysis of influence of degree of internationalization on corporate performance measures. The existing researches differ a lot by the use of both performance indicators and measures of degree of internationalization:

- depending on the choice of measure of DOI it is possible to control different internationalization patterns. Usually international diversification is classified into two classes – diversification of assets and diversification of markets. The most commonly used measures of these types of CID are foreign-assets-to-total-assets (FATA) and foreign-sales-to-total-sales (FSTS) ratios correspondently. In opposite to event-studies approach the use of FATA measure allows to analyze not only non-organic foreign growth (cross-border M&As) but also foreign greenfield investments;

- a use of different corporate performance indicators also allows to study different types of effects of internationalization in different time horizons. Typically researches use the following two types of corporate performance measures:

  1) The first group of measures represents the current corporate performance during a particular period of time (usually 1 year) but does not incorporate expectations of potential efficiency changes in the future (usually benefits from internationalization are fully realized in the period of several years). The group of these measures consists of operational (revenue, operating cash flow, EBIT-based measures (EBIT margin, ROS, ROE, ROA, etc.), others) and financial performance measures (WACC and other cost-of-capital related measures) which are studied separately. The following papers represent this class of studies: Qian and Li (2002), Guler et al. (2003), Moeller and Schlingemann (2004), Lu and Beamish (2004), Contractor et al. (2007), Bobillo et al. (2010), Rugman and Chang (2010), Singh and Nejadmalayeri (2004), Joliet and Hubner (2006);

  2) The second group of measures incorporates expectations of the future corporate performance by combining accounting measures with market-based metrics in different multiples (Tobin's Q, PE, market-to-book ratio, others; see Bodnar et al. (2003), Chang and Wang (2007), Rugman and Chang (2010)).

The weakness of the first group of measures is that they do not simultaneously count for operational and financial efficiency effects of internationalization. In fact the change in operational efficiency measures should be compared to the change in opportunity costs measured by the change in the cost of capital. This paper proposes a new approach for solving the problem of a simultaneous analysis of operational and financial efficiency change related to corporate international diversification. The current model is based on the economic profit concept. Since economic profit comprises the cost of capital, which represents the risks associated with a firm and its internationalization decisions, it is an appropriate measure of *strategic performance* of a firm. The economic profit or residual income is measured as follows:

$$RI_{it} = (ROCE_{it} - WACC_{it}) \cdot CE_{it} \qquad (1)$$

where *RI* is the measure of economic profit of company *i* in period *t*, *ROCE* – return on capital employed, *WACC* - weighted average cost of capital, *CE* – amount of capital employed.

As an economic profit measure for estimation of internationalization-performance relationship the ratio of residual income to capital employed may be used. Thus, both ROCE and WACC as functions of the degree of internationalization and other control variables should be estimated.

2.2 Hypotheses

Based on existing studies as well as our analysis of internationalization processes in Russia we have formulated several research hypotheses for a sample of Russian companies.

2.2.1 Hypotheses for ROCE-DOI relationship

The majority of internationalization-performance researches state for a non-linear pattern of relationship between DOI and operational efficiency measures. Lu and Beamish (2004) identified the most general pattern of this relationship demonstrated by horizontal S-shape curve which was also supported by Bobillo et al. (2010), Rugman and Chang (2010). The S-shape curve consists of 3 sequential intervals:

1) at a low level of international diversification the operating performance is decreasing with an increase in DOI since internationalization-related costs (learning costs, cost of coordination and control of abroad divisions, other transaction costs) are too high in comparison with a low marginal increase in efficiency and growth of abroad sales;
2) at a medium level of internationalization the performance is supposed to increase due to significant benefits (economy of scale and scope, diversification of country risks, access to foreign knowledge and cheaper resources, increase of market power, etc.) which are higher than transaction costs;
3) at a high level of DOI the performance may start descending again due to the unmanageable international complexity of organizations (over-internationalization stage).

For the developed countries the most typical result of estimation of the relationship is a horizontal S-shape curve, but there are some studies which also identify a U-shape curve[3] (which represents only the first and the second stages of the S-shape curve) and an inverted U-shape curve[4] (which represents only the second and the third stages of the S-shape curve). For the emerging markets (India) a U-shaped relationship has been identified by Contractor et al. (2007). It is presumed that the companies from the emerging markets typically do not reach such degree of complexity related to an over-internationalization stage when further internationalization becomes value destroying.

Hypothesis 1.1: The relationship between ROCE and DOI is non-linear and follows an U-shape pattern for Russian companies

2.2.2 Hypotheses for WACC-DOI relationship

Singh and Nejadmalayeri (2004) have identified an increase of liabilities in capital structure related to corporate internationalization. The fact is motivated by a corresponding increase of debt supply on capital market which is driven by diminishing bankruptcy risks of internationalizing firms due to overall risk diversification. But conversely there exist other studies that state for a downturn in debt supply related to corporate internationalization due to the following factors (see e.g. Doukas and Pantzalis, 2003):

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[3] For instance see Capar and Kotabe (2003), Ruigrok and Wagner (2003).

[4] For instance see Hitt et al. (1997).

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a) typically internationalization is associated with higher growth rates and a growing complexity of organizational design of a business both of which increase agency costs of debt holders;

b) amount of intangible assets are likely to increase with international diversification of business which implied additional risks to debtholders as these assets cannot be monetized in case of bankruptcy.

Since there is no theoretical base for hypothesizing a prevailing of one effect above another as a hull hypothesis we assume that the effects compensate each other and capital structure is not supposed to change due to internationalization.

Hypothesis 2.1: A combination of debt and equity in capital structure does not depend on DOI for a sample of Russian companies.

Corporate international diversification influences cost of equity through the following three factors:

a) change in level of risks: there may exist a non-linear relationship between DOI and level of risks to shareholders due to an addition of new internationalization-specific risks on initial stage of international diversification, meanwhile on a later stages of CID one could expect a decrease of shareholders' risks due to their diversification;

b) rise of shareholders' agency costs: it is supposed that with growth of DOI the costs of monitoring and controlling company's management also increase;

c) change in capital structure: different levers are described in above in paragraph related to Hypotheses 2.1.

Singh and Nejadmalayeri (2004) state for a higher risk price for shareholder determined by beta coefficient for MNCs.

Hypothesis 2.2: Cost of equity increase with international diversification. There may exist a non-linear relationship of U-shape form between cost of equity and DOI for a sample of internationalized Russian companies

The most significant debt-specific factors are as follows:

a) change in debt maturity: as it was identified by Singh and Nejadmalayeri (2004) that MNCs typically raise a longer-term debt than domestic firms do. It is thus resulted in higher cost of debt;

b) change in efficient tax rate related to a move of profit centers in other countries: this factor directly influences the after tax cost of debt.

Hypothesis 2.3: Cost of debt is growing with an increase in DOI for a sample of Russian companies.

2.2.3 Hypotheses for Q-Tobin – DOI relationship

The Q-Tobin represents expectations of shareholders regarding future company's performance (mostly strategic investors, who are focused on long-term development of a firm). Given that internationalization strategies are used widely, we can expect that they create value in long term even if a short-term (current) internationalization effects may be negative. This may be explained by several factors such as a long-term benefits which could not be gained in short term (benefits from access to new technologies and R&D results), or

short-term internationalization costs may be considered as investments in maintaining market position in long-term (for example a purchase of an abroad company way lower current performance but make a company better-off comparing to a case when a competitor makes this purchase), etc.

Hypothesis 3.1: Q-Tobin increases with increase of degree of internationalization for a sample of Russian companies. With low current performance related to internationalization Q-Tobin would be also lower.

3 THE METHODS

3.1 The sample
The proposed research framework is applied on a sample of Russian companies. We have collected the data of 50 Russian companies which included:
- 40 internationalized companies which have made at least one cross-border acquisition in the period from 2000 to 2010;
- 10 domestic companies with a zero internationalization level which are included in the list of 200 Russian companies with the highest capitalization.

All chosen companies are public and disclose all the key information which should be used in the current research. The data is derived from Bloomberg database. The data has been collected for a time span from year 2005 to year 2010. Overall we have an unbalanced panel of 183 observations. Moreover there exist some observations with missing values for some of the variables. Descriptive statistics for key variables in the dataset is depicted in Table 1.

Table 1: Key variable's description and statistics for the sample

Variable	Description	Obs	Mean	S. D.	Min	Max
Efficiency measures						
ROCE	Return on capital employed (%)	178	24,16	18,53	-19,58	108,44
WACC	Weighted aver. cost of cap. (%)	183	9,32	3,19	1,33	20,11
Internationalization measures (DOI)						
fsts	Foreign sales to total sales	183	0,32	0,32	0,00	0,98
fata	Foreign assets to total assets	103	0,10	0,19	0,00	1,00

3.2 Modeling procedures
We do separate estimations of ROCE, WACC and Q-Tobin's equations on panel data for years 2005-2010. We employ GLS estimates under assumption of random effects. A Hausman test is also used in order to test an endogeneity problem in panel data regressions. We also test for non-linearity and other formulated hypotheses. RI is calculated analytically based on the estimations of ROCE and WACC.

As for DOI the FSTS measure is used. We do not employ into the regressions the FATA measure because of its low availability. Nevertheless, due to a sample selection procedure where we have chosen the companies which conducted at least one cross-border M&A in the last decade, both assets and market international diversification are analyzed.

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An equation for ROCE has the following form:

$$ROCE = X \cdot \delta + \alpha_1 \cdot fsts + \alpha_2 \cdot fsts^2 + \alpha_3 \cdot fsts^3 + \varphi \qquad (2)$$

where X is a matrix of the following control variables: firm size (measured by logarithm of sales), product diversification (measured by Herfindahl-Hirschman Index calculated on the basis of product segmentation disclosed by firms in their financial statements), book value of intangible assets normalized by total amount of assets, managerial agency costs (inverse of assets turnover ratio) and composite variables of DOI and product diversification as well as DOI and intangible assets ratio.

For testing the hypothesis 2.1-2.3 an equation for WACC has been decomposed into three parts: 1) financial leverage (share of debt in the capital employed), 2) cost of debt and 3) cost of common equity:

$$WACC\,(fsts) = \frac{D}{D+E}(fsts) \cdot CoD\,(fsts) + (1 - \frac{D}{D+E}(fsts)) \cdot CoCE\,(fsts) \qquad (3)$$

where D states for amount of debt, E – common equity, CoD - cost of debt , CoCE - cost of common equity. A share of preferred equity in capital structure is extremely low in the studied sample and constitutes no more than 0.1% of capital employed and is not taken into analyses in the present research.

Thus according to the defined approach we estimate the following equations (4) – (6):

$$Debt\_to\_assets = \beta_0 + \beta_1 \cdot fsts + \beta_2 \cdot fsts^2 + \beta_3 \cdot fsts^3 + \beta_4 \cdot ROE3 + $$
$$+ \beta_5 \cdot growth3 + \beta_6 \cdot \ln\_sales + \beta_7 \cdot dummies + \varepsilon \qquad (4)$$

$$CoD = \varphi_0 + \varphi_1 \cdot fsts + \varphi_2 \cdot fsts^2 + \varphi_3 \cdot fsts^3 + \varphi_4 \cdot ROE3 + $$
$$+ \varphi_5 \cdot growth3 + \varphi_6 \cdot \ln\_sales + \varphi_7 \cdot debt\_to\_assets + \varphi_8 \cdot dummies + \varepsilon \qquad (5)$$

$$CoCE = \gamma_0 + \gamma_1 \cdot fsts + \gamma_2 \cdot fsts^2 + \gamma_3 \cdot fsts^3 + \gamma_4 \cdot ROE3 + $$
$$+ \gamma_5 \cdot growth3 + \gamma_6 \cdot \ln\_sales + \gamma_7 \cdot debt\_to\_assets + \gamma_8 \cdot dummies + \varepsilon \qquad (6)$$

where *dummies* states for dummy variables representing industry of a firm and profitability shift related to crises years 2008 and 2009.

For testing the hypothesis 3.1 we estimate the following equation:

$$Tobin's\_Q = Y \cdot \delta + \alpha_1 \cdot fsts + \alpha_2 \cdot fsts^2 + \alpha_3 \cdot fsts^3 + \varphi \qquad (7)$$

where *Y* is a matrix of control variables, which include: firm size (*ln_sales*), product diversification variable (*prod_divn_hhi*), proxy for agency costs measure (*asset_turnover*), measure for book value of intangible assets (*intang_to_tot_assets*), composite variables of DOI and product diversification as well as DOI and intangible assets ratio (*diverse* and *intasssales_to_fsts* correspondently), debt to assets ratio (*Debt_to_Assets*), three year average

return to equity (ROE3), EBIT margin in current year (*Ebit_margin*), three year average sales growth rate (*Growth3*), dummy variables for industries using SIC and for a control of crisis period 2008–2009. The chosen variables are key variables, which influence Q-Tobin of internationalizing companies (for a detailed analysis of variables choice see Lu and Beamish, 2004; Chang and Wang, 2007).

4   FINDINGS

4.1   Testing the ROCE to DOI relationship

In order to define a proper functional form of the ROCE-DOI relationship all variables have been initially included in the equation (2):

- To measure a direct internationalization impact on performance the cubic polynomial function components has been employed ($fsts$, $fsts^2$, $fsts^3$). It allows to test the formulated hypothesis of non-linearity of internationalization impact;
- To test two other hypotheses of an influence of product diversification and intangible assets on ROCE-DOI relationship two additional variables were used: composite variables of DOI and product diversification as well as DOI and intangible assets ratio.

The results of estimation are represented in Chart 1. Our main findings are as follows:

- We found out that the ROCE-DOI relationship follows a U-shape pattern (see Chart 1). At the early stage of internationalization (when the share of foreign sales is in the interval between 0% and approximately 50%) cross-border diversification significantly diminishes the return on capital employed. At the later stages of internationalization (when the share of foreign sales exceeds half of total sales) a sharp increase in profitability has been identified. As it is shown the initial drop in efficiency is compensated by its subsequent growth only at the level of absolute internationalization (FSTS > 90%). The significant drop in ROCE at the early stage of internationalization of Russian companies may be explained by both strategic motives (which presume return in the long run, e.g. a motive of acquisition of innovative technologies or new knowledge) and at the same time by possible irrationality of managerial behavior (such phenomenon as managerialism and hubris are studied in Seth et al. (2000)).

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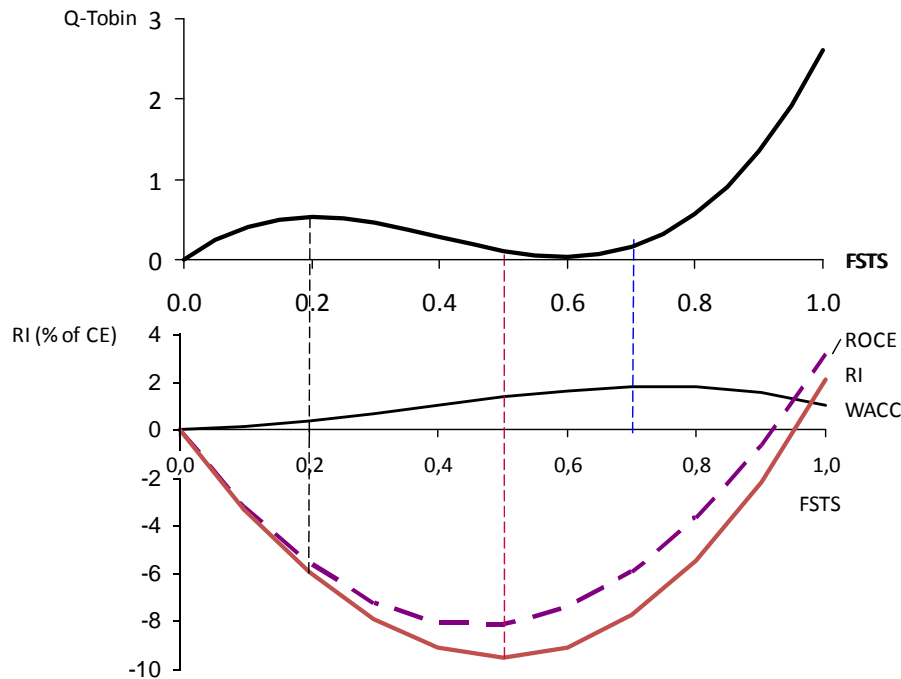
Chart 1: Q-Tobin - Internationalization relationship compared to relationship of internationalization and current performance (RI)

4.2 Testing the WACC to DOI relationship

According to the methodology described in the above section a separate estimation of influence of DOI on capital structure, cost of debt and cost of common capital has been carried out. The results are as follows (see also Chart 2):

- We identified no significant influence of DOI on capital structure (i.e. the choice between common equity and debt; these results of estimates for eq. 4 are not depicted in the paper);
- Cost of debt positively and significantly depend on DOI. The fact is described by the change in the time structure of debt – with an advancement of international diversification companies launch longer term projects which require external financing for longer periods of time. As it is commonly known longer term financing is typically associated with higher required return to debt;
- For the cost of common equity (CoCE) we found a non-linear relationship form. This form may be described by the proposition that at low degrees of internationalization shareholders consider CID as an addition of new internationalization-specific risks while at the later stages of internationalization they regard a firm as a well diversified portfolio of businesses in different countries, characterized by comparably lower level of risks;
- An estimation of weighted average cost of capital is computed analytically with a use of the given capital structure of each firm in each year (see Chart 2). We can conclude that CID typically increases the cost of capital employed (if compare to domestic firms).

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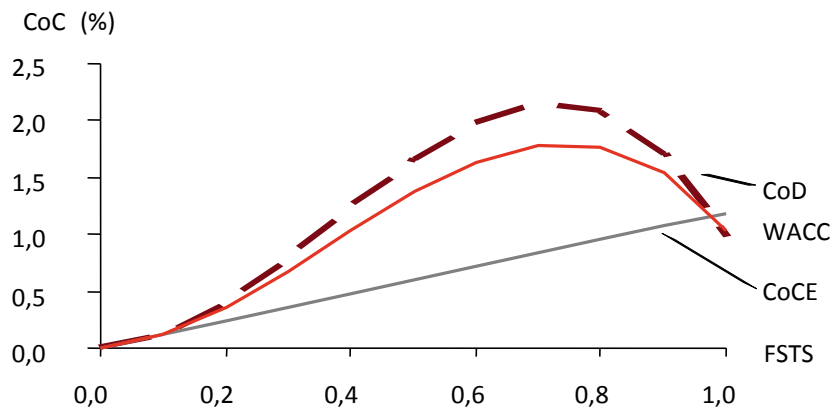
Chart 2: ROCE to DOI relationship: a U-shape curve

4.3   Estimation of economic profit

In present research the current performance measure is defined by an economic profit spread (or residual income spread) which equals to a difference between return on capital employed (ROCE) and weighted average cost of capital (WACC), see Chart 1. The results show that residual income ratio mainly follows the ROCE pattern. Influence of WACC on the economic profit margin is significant but rather low. The overall internationalization-performance relationship of Russian companies seems to follow a U-shape curve with a rather high variance in performance.

4.4   Estimation of Q-Tobin – DOI relationship

The estimation of Q-Tobin - internationalization relationship is depicted on Chart 1[5]. It is shown that the relationship follows a horizontal S-shape curve, which consists of 3 stages:

- Stage 1 – start of internationalization (DOI is between 0 and 0.2). On this stage there may appear a value creation due to low dependence of the whole business on international affairs but potentially significant benefits (access to technology, markets which are similar and close to domestic, etc).;
- Stage 2 – adaptation to internationalization (DOI is higher than 0.2 and lower than 0.7). The business suffers from increasing transaction costs and a need for transformation in order to adapt to new international structure;
- Stage 3 – matured multinational (DOI higher than 0.7). The business is well adapted to the international structure, it gains the whole number of benefits, but not tackles with the problem of over complexity (where efficiency starts decreasing).

In comparison of the Q-Tobin – DOI and RI – DOI results it should be stated that on overall the internationalization strategies are expected to create value in long term regardless to a drop in current performance of a firm. Thus a drop in current performance should be mostly explained not by irrational motives of management, but mostly by strategic aspects which presume competitive advantages in long run.

5   CONCLUSIONS AND POLICY IMPLICATIONS

This paper contributes to the internationalization-performance literature by proposing a new approach for measuring corporate performance related to internationalization which is based

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[5] Chart 1 represents the Q-Tobin – DOI relationship for an average degree of product diversification.

on economic profit concept. This new method simultaneously accounts for a change in profitability (measured as return on capital employed) and opportunity costs (measured by weighted average cost of capital) related to a level of cross-border diversification. The methodology of empirical estimation of internationalization efficiency has also been developed.

The proposed methodology has been used for estimation of efficiency of internationalization strategies of large Russian companies. It has been shown that internationalization-performance relationship follows a U-shape curve (the finding is consistent with the results of Contractor et al. (2007) derived for another emerging market - India). At the initial stage of international diversification corporate performance declines while at further stages of diversification it grows up. This form of regularity is driven mainly by companies' operating performance (return on capital), while opportunity costs (cost of capital) changes also in a non-linear pattern but with a lower effect. Regardless a drop in current performance related to internationalization the stock market expects that in long run the internationally diversified firm could create higher value than the local peers.

As an implication of the present research for corporate decision makers it may be stated that at the initial level of international diversification the internationalization decisions should be made with a high degree of caution. The prestige and other irrational motives which may lead to the value destruction should be pruned. During the analysis of internationalization efficiency not only operational, but also financial effects should be counted. Companies should also be ready for a probable initial decline in operating performance motivated by an excess of internationalization costs over corresponding benefits.

As for long run internationalization strategy on average we state the following two are likely to be the most sustainable: a) *local focus strategy* with low degree of internationalization (get missing technology or go to nearest well-known abroad markets) and proposition of well customized local products, b) *fully internationalization strategy* with lower level of country-specific customization, but higher operating efficiency.

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SIGNIFICANCE OF LONG-TERM RELATIONS WITH CUSTOMERS IN THE MODERN ENTERPRISE MARKETING

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ABSTRACT
Marketing methodologies today are changing significantly. Because of the widespread use of computers and the Internet, former practice does not show good results anymore. On the other hand, application of new marketing methods enables much stronger impact on the market than before, as well as multiplied profit. There are numerous reasons why things are such. Also, there are multiple reasons for changing current practice. For example, advertising budget of some companies has doubled in the last 4 years, but the intensity of investments is lost at the beginning by the distrust of potential buyers. TV house revealed that only 1 of 8 viewers of television ads believes to promises of these ads. Such trend of declining confidence is seen in every media. As response to these trends, the current marketing practice provides companies a strong influence at the market. New marketing methods contribute to a significant increase of money when investing in attracting clients. One such method is the long-term management of relations with customers. In the modern approach, there is a shift is in the focus – from traditional marketing tools and business orientation, to the orientation on consumers, value and service dimension with strong hold on a long-term relationship with consumers. Cycle of the marketing value of the product and consumers is reflected in the fact that product value decreases over time, and customer value grows over time. In the context of the above mentioned, very important are consumers' lifecycle, consumers' value over the long term, identification and winning over the consumers, expansion of the customer base and retaining of customers. All of these are supported by the modern digital technology. This approach is called the red thread of the modern marketing concept by number of theoreticians and this is the matter we want to elaborate in more detail in this paper.

Keywords: Long-term customer relations, Marketing, Marketing concepts, Modern approach to marketing

1 INTRODUCTION

At the end of the 20th century, a series of new marketing concepts arises giving a new long-term dimension to the role and importance of consumers, and their interests are not only the loyalty of consumers but having long-term relations of cooperation and partnership with the key customers and consumers, with significant form of personalization of these relations.

Strong correlation between satisfaction, loyalty and profitability has been proven in practice. Main prerequisite to loyalty of consumers is satisfaction. Namely, despite great achievements that are related to the study of consumers, they still haven't, at least not completely, answered the question why consumers behave the way they do in the purchase and consumption of products and services. Scientists of different profiles find human brain mostly incomprehensible. Consumer behaviour as a discipline, aimed at broader range of issues

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related to the development and characteristics of man as a consumer is not concerned with defining strategies of establishing and maintaining relationships with customers.

These new trends in marketing have a completely new approach to relations with customers and other key stakeholders in the business. Their creation is a result of new information and understanding and so convergence of science and practical problems in the economy and society. Development of technology also had significant role, especially IT, which was a major precondition for the development of these concepts.

Recently, there has been developed a number of concepts that essentially more or less differ, but they all focus on developing long-term relations with customers as: Relationship marketing (marketing of relations), database marketing(marketing supported by databases), Customer Relationship marketing CRM (customer relationship management). In addition to the above mentioned, one can find the following expressions in the literature: Retention marketing, Interdependent Marketing, Loyalty Marketing, 1:1 (one-to-one), Partnership Marketing, Marketing with Permission, Frequency Marketing, Real-Time Marketing.

The most prevalent direction of analysing the development of long-term relationships with customers and other partners, is relationship – marketing. There is no generally accepted definition of this term. Usually, Gronroos's definition is taken as most complete, and it states the following: "Relationship marketing represents establishment, development and maintenance (and break if needed) of relationships with customers and other stakeholders, with gaining profits, and in the way that enables reaching the goals of all parties, which is achieved by common sharing and fulfilling of expectations" (Harker, 1999, pp. 13–20).

The essence of relationship is in the distinction from the classical transactional marketing in several ways, as shown in the following table (Table 1).

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Table 1: Transaction vs. Relationship Marketing

	Transaction Focus	**Focus on Relationships**
Time perspective	Short term	Long term
The dominant marketing function	Marketing mix – classical 4P	Interactive marketing (supported by the management activities of marketing mix 7P)
Price elasticity	Consumers are more sensitive to price changes	Consumers are less sensitive to price changes
Dominant dimensions of quality	Focus on attributes – technical dimension of quality. Quality is care of "production" personnel	Focus on consumer value Quality and interaction. Quality is care of all personnel
Measuring customer satisfaction	Indirect - through market share i.e. realized sales	Direct management of customer base
Gathering information about customers	Discontinuous relationship with customers. Research is carried out from time to time	Continuous contact with customers
The basic orientation of business operations	Orientation on individual sales	Orientation on retaining of customers
Interdependence between marketing operations and personnel	Weaker cooperation and trust	Cooperation is of strategic significance
Additional services to customers	Deemphasized consumer services. Limited engagement in relation to the fulfilment of customers' expectations.	Emphasis is on customer services. Great engagement in relation to the fulfilment of customers' expectations.
Internal marketing service	Internal marketing is with or without limited significance for the success of business operations.	Internal marketing has strategic significance for the success.
Product type	Consumer--> <-- Permanent--> <--Industrial--> <--Services <---> goods consumer goods goods	

It is used in all economic fields, and it is gaining more importance in the consumer goods and services. It is usually analysed on three basic levels (Veljkovic, 2009, p. 174):
- Tactical level (similar to the activities of sales promotion);
- Strategic level (emphasis on development of partner relations with customers);
- Philosophical level (it reflects the essence of the philosophy of marketing – the whole organization is focused on delivering total satisfaction to customers and maintenance and development of their business).

It may be concluded, in general, that there has been a change in the overall logic of consideration at companies from different sectors of the economy. Modern age requires companies from various industries to behave in a way so that they fully respect their partners and develop long-term relationships with their major customers, which is the highest stage in the evolutionary development of business logic.

2 LOYALTY AND SATISFACTION OF CONSUMERS AS THE BASIS FOR BUILDING LONG-TERM RELATIONSHIPS

Correlation between satisfaction, loyalty, and profitability of customers has been empirically proven (Hallowell, 1996, pp. 27–42).

Satisfaction is the main prerequisite for consumer loyalty, but not the only one. One should, in this context, look for a deeper approach, which involves the intensity of satisfaction and the intensity (positive or negative) of the reaction of consumers to company's offer. For example, if you have two competing companies which came to same results of measuring satisfaction that 85% of consumers are satisfied with the products or services of the company, it is quite different position than of the company which has 55% extremely satisfied, 20% very satisfied and 10% satisfied, from another company in which the ratio is 10% extremely satisfied, 25 % very satisfied and 50% satisfied. The experience shows that it is 42% more likely that the loyal consumer will be the one who is "extremely satisfied" than that one who stated to be "satisfied". Consumer may be satisfied with a product/service until such time as he/she sees a brand that better meets his/her needs and expectations. Satisfaction may decrease in time, either because of the higher expectations or for the reasons of lower performances.

Extremely loyal and enthusiastic consumer is not only satisfied, but this is the person that buys the products and services of the company and expands positive oral propaganda and obtains new customers for the company.

Trust and commitment have major role in forming of loyalty of consumer to the brand and company. We conclude that the loyal consumer is a precondition to a successful business.

The question is how to define loyalty. There are two approaches. One starts with consumer attitudes, that is their preferences, based primarily on satisfaction they had in the previous shopping. Alternative approach is behavioural approach, based on the actual situation and the actual purchase. This type of measuring satisfaction, having in mind the modern scanning systems and other types of sales that can accurately determine the buying behaviour became more appealing to managers. Applying the two known methods of measurement, all consumers can be divided into four categories, depending on the degree of loyalty measured by purchases/visits to service companies:
- Absolute loyalty;
- Unsteady loyalty;

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- Relative loyalty;
- Disloyalty.

Consideration of this matter is much more subtle, because loyalty of customers is different at particular segments of the market. This approach does not answer the question why a consumer buys certain brand. That is why one-dimensional observation of loyalty cannot give complete and accurate answers. Consumer's attitudes and preferences to some service companies must be monitored, as well as their real buying behaviour. It provides a framework that defines loyalty as the favoured attitude towards a particular brand, which results in constant purchases over time (Asael, 1992).

It is possible to identify four types of loyalty, depending on the frequency of re-buying and intensity of attitudes towards a particular brand, such as: false loyalty, latent loyalty, stable loyalty, no loyalty. There are common cases and situations where loyalty does not exist. Customer simply does not see the difference between alternatives and does not prefer any of them, and the purchase is done mostly on a random choice. In practice, it is often assumed that profit is a measure of the importance of customers. The results show that each form of loyalty is not profitable for the company, i.e. a good part of the loyal customers is not profitable, and therefore there is a need for a strategic approach to loyalty. According to this principle, one should take into account not only profitability, but also estimation of the relationship between profitability and long term cooperation with some clients.

For the company to recognize the true benefits, it must accept the concept of value, which means that profitability is essential, but there are other benefits that can indirectly affect the business results of the company, but also the loyalty of the employees, competitive companies, etc.

3 STRATEGY OF DEVELOPING LONG-TERM RELATIONSHIP WITH CONSUMERS

Basis for the development of long-term relationship is strategic focus. The main goal is to, by delivering a quality product/service (by the standards set up by consumers), influence the long-term satisfaction of consumers, which is a prerequisite for full loyalty. When a company has motivated and satisfied employees, from the first line of serving to the managerial position, with the corporate culture, success is guaranteed. Loyalty of RELATIONSHIP to business practice is placed in a square: Satisfaction of consumers – quality of product/service – customers' loyalty and increased profit - satisfaction and loyalty of employees.

The basic elements of the long-term relationship derive from elements necessary for the proper functioning of marketing. Therefore we can say these elements are the following:
- Knowledge of consumers' needs and desires, characteristics, and effects of some factors on their behaviour;
- Real marketing i.e. marketing way of thinking;
- Achievement of modern concepts that address the development of long-term relationships with customers;
- Options and needs of companies;
- Understanding the role and importance of all those involved in the process of creating and delivery of products/services (value);
- Long-term way of thinking and behaviour; and
- Company working as a whole.

The very process of long-term relationships can be separated into the following steps:
- Interaction with consumers;
- Recognition (personification) of consumers - treating each customer as an individual through personal contact or automated process;
- Creating a loyalty program - rewards and added value;
- Continuous improvement of concepts (control, measurement and feedback of information);
- Corrective actions - management of consumer dissatisfaction.

By creating a dialogue with customers one can come up with valuable information, which is converted into knowledge, and knowledge is the basis for the adjustment of supply and taking action on establishing long term relationships. Further, efficient and effective action leads to satisfaction of consumer, creating confidence and familiarity. Satisfaction, trust and commitment lead consumers to loyalty and loyalty leads to profit. Profitability of the company and satisfaction of consumers is initiated and supported by interaction with consumers (Nova Trgovina, 2001, pp. 53−60).

Personalization and customization are different in the fact that the personalization often involves automatic adjustment until the adjustment is done automatically, but at the request of user. It usually refers to adjustment of: products, services, price and payment terms, distribution channels and adjustment of communications.

4   THREE FORMS OF TRUST AND THE EXAMPLE OF THE BANKING SECTOR

Priority of the management for customer relations (Customer Relationship Management-CRM) is creation of loyal customers. The key to creation of loyal customers is in creation of the feeling of confidence. Certain number of authors in the field of management (Rousseau, Sitkin and Cramerer, 1988) developed the model of confidence. This model has been successfully applied in corporate banking (Saparito, Chen and Sapinenza, 2004) and is applicable to other areas.

The next model makes the distinction between three modes of trust: calculated trust (calculus based trust), trust based on relations (relational trust) and trust based on identification (identification based trust).

Calculated trust is the basic form of establishing a relationship between the users of a company. The cooperation with the company is reduced to the exchange without creating social and emotional basis of relations. Calculated trust is established on the principle of mutual interest.

The key to achieving successful relationship of transactional trust is consistent behaviour. Fulfilling given promises motivates users to continue the cooperation with the company. The largest number of users base their relations with the company just on the feeling of calculated trust.

Developing a sense of mutual trust culminates by establishing feelings of trust based on identification. It is no longer enough to show a consistent behaviour and fulfil the promises. The trust based on identification is characterized by the existence of common goals, respect of

the same system of values, and mutual ability to predict the reactions of the other party (Pearson, 2006).

Only a small number of users develop a sense of confidence based on the identification with the corporation. They are willing to continue to cooperate with the company even in the case they suffer discomfort, i.e. develop a sense of loyalty.

Establishing a relationship of relation trust or trust based on identification provides the following advantages (Saparito et al., 2004):
- Likelihood to switch users to a firm that offers more favourable conditions is smaller. Users are making no effort to finding companies that offer more favourable terms.
- Users are motivated to continue cooperation with the company, although suffering embarrassment, because they cannot easily transfer relations that are created to another company.
- Relational trust and trust through identification leads to the creation of loyal customers.

Intangible assets are among the most important sources of competitive advantage in the banking industry, for example. In order for it to be a source of competitive advantage, intangible property must offer (a) a unique value that is (b) relevant to users. Then, intangible assets enrich the offer because it points to the uniqueness of the company in comparison to the competition.

Marketing has a key role in the creation of elements of intangible assets as: corporate reputation (corporate reputation), the corporate ethos (corporate values), the intangible value of the brand (brand equity) and so on.

Example: Merging of Bank Intesa and Sanpaolo IMI Group, first one from Milan and the other one from Turin. Merging entered into force in January 2007 by which the Intesa Sanpaolo Group emerged as the largest banking group in Italy and the third one in Europe on the basis of total assets.

This merging represented a consolidation of several marketing challenges: (a) positioning the brand Intesa Sanpaolo in the same way in a larger number of markets, and (b) the creation of a common vision and corporate culture, which will be able to create a sense of belonging and commitment to the new group (*Intesa Sanpaolo*, 2008, October).

Positioning of brand Intesa Sanpaolo Group and the creation of a common vision and a corporate culture is based on corporate system of value as one of the most important elements of intangible assets. This system takes central position in all internal and external communications and makes a basis of all marketing activities.

In order to define the corporate value system, qualitative research by method of brainstorming was conducted with representatives of all local banks.

Brainstorming defined key insights of the users at the local level, after which they were crossed with the profile of brand Intesa Sanpaolo, which "leads to large values that transcend borders and unite people; they are close to people from all countries and at the same time belong to the group" (Intesa Sanpaolo, 2008).

Corporate system of values of Intesa Sanpaolo Group communicates: imagination, humanity, stability and hope. For example, for the practical application of this system of value, one of several of these, is the slogan: We think ahead with you (Intesa Sanpaolo, 2008). How to define global identity: Case history of Intesa Sanpaolo subsidiary international banks).

5   MULTIDIMENSIONAL RELATIONAL MARKETING

Without neglecting the emotional effects, the company must come up with what consumer wants and expects, in what way consumers want a company to treat them as well as products close to them: In order to incorporate demands in the corresponding profile of the product or service, marketing companies must understand the demands of consumers. Using and achieving mutual lasting business relationships with individual customers is priority and the pledge of successful business. That is why it can be argued that the value of the product declines over time, and customer value grows over time, in which the consumer life cycle (CLC) is of utmost importance. CRM is a strategic framework for the rational marketing. CRM can be expressed as an umbrella that covers: Winning over ------------→ - Taking over and expansion of the customer base --------- → Retention.

CRM is a widely established approach that is primarily oriented to individual consumers and their individual demands. As company develops individual relationships with each of customers ETFS stage - Engage, Transact, Fulfil, Service – they imply that such a cycle refers to the stages through which a consumer passes with each purchase, and that such a cycle is repeated over again (their relationship is made up of a series of such cycles). Concept of customers' lifecycle is usually used by companies for CBM activities which include modelling of consumer behaviour (Customer behaviour modelling). Nowadays it is widely accepted the understanding that among the main indicators of modern marketing metrics are: 1) the total number of consumers, 2) revenue per customer, 3) customer satisfaction, 4) customer retention rate, 5) an increase in sales and 6) the cost of acquiring customers, 7) cost of sales, 8) costs of servicing customers and 9) the cost of retaining customers.

Therefore, there are two groups of specific indicators – one on the revenue and the other on the cost side – overlapping to certain extent with the information offered by traditionalists.

Experience shows that majority of companies is focused on the first five categories, while less to the others. CRM indicators are in direct connection with the profitability of consumers and the greatest attention should be given to them.

6   CONCLUSION

Customer relationship management represents the activity of complying business strategies, organization structure and culture of the company, information on customers and IT with the aim in continuous satisfaction of customers' needs and, at the same time, gaining business benefit and profit. Stages of implementation of the strategy are as follows: operational management that implies automation and optimization of sale – so called operational CRM, automation of marketing, measurement of marketing performance, monitoring contacts with customers, as well as automation of support to the users through call centres.

Segmentation represents the second stage of implementation of CRM which principles imply creation of the market map, where target segments may be distinguished according to the similar behaviour of customers.

The principle of targeting directs marketing towards efficient allocation of business resources. The principle implies adequate determination of the target group for certain package of the offer.

This is followed by the model of trust: calculated trust, relational trust, development of mutual trust that achieves its maximum by establishment of trust based on identification.

Today, competitive advantage may be provided only by user-oriented strategies (Customer-centric), which means that companies build their positions based on how well they serve their customers. The user-oriented strategy is not the aim that may be achieved or proclaimed, but it is a "moving target" and constant orientation and manner in which the company must operate. This is enabled by CRM, which secret lies in the fact that it is different to every company, that does not exclude to possibility that it may be learned from the experience of others. There are three key reasons due to which CRM is getting increasingly more important: competition is growing day by day, it is more profitable to keep the existing customers than to obtain the new one, and technology that enables this has reached the satisfying level.

It is clear, today, that the CRM is a business philosophy and related strategy of advanced management of relations with customers according to the principle of respect of individual importance of every consumer and this is where it's true perspective for development of marketing in the future at the global level.

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THE AFFECTS OF THE PROCESS IMPROVEMENT TO BUSINESS PERFORMANCE

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ABSTRACT
The main aim of the businesses is to make profit and grow sustainably accordingly. The elements which enable companies to reach this aim are price, cost and customer satisfaction. While the price is determined in the competitive market, cost is shaped in the business processes. The customer satisfaction, on the other hand, is to what extent the output of these processes satisfied the customers. Process consists of the stages which start with taking an order from the customer and end with the delivery of the order. Should the business be likened to a chain, each link represents a process (a function). In order to improve the performance the weak link needs to be strengthen. Strengthening the weak links will only be possible by determining the halting points of the process and removing them. When the notion of the process and its improvement dealt with, the notion of value emerges. The value created in the process means cost in the output, quality and speed improvement for the company. Hence, creating values results with the customer satisfaction. Process value analysis, is the overall operations of the definition and analysis of some certain processes. It defines all the activities from production stage to its presentation to the customer, the inputs used in the operations. At the end of the analysis whether the activities in the process are necessary and if they create added value or not is considered Activity creating an added value adds value to the product the customer wanted, whereas the ones which didn't create added value cause cost and spent time to increase and do not add value to the product from customer's point of view. The use of excessive amoun of input, cause the costs of the product not creating added value and accordingly in the product costs to increase. The removal of these activities would provide a decrease in the expenses and strengthen the competitive situation of the company. The implementation focusing on the process and activities forming it, analyzing these methods and improvement efforts must be continuous. Continuous improvement works would return to the company in the end, as profit increase, shareholder, customer satisfaction. In this study, effects of the process improvement to the business performance will be studied.

Keywords: Business performance, Process improvement, Value analysis

1 WHAT IS PROCESS?

Process, simply, is the whole process of stages where inputs become outputs. When it is only considered in terms of production, it is seen as a place where materials are converted into products. However, this point of view means excluding the components of supplier and customers from the extent. Process is composed of the processes which start with taking an order from the customer and end with the delivery of the order. Process is defined as a component of seven elements (ability, tasks, team, technics, time and devices) by Prasad (1999, p. 178). Process is a structure bringing these seven components together in the most optimum way, using and managing it. This structure may as well be called as process management. Actually, when these seven components are dealt, it is seen that in the base of business management, the management of the processes takes place.

On the other hand, when process is considered from the customer's point of view the notion of value emerges. Value is the most important output of the process both for the business and the customer (figure 1). Customer satisfaction emerges as the process enables the inputs to be used effectively for the customer. Some elements such as cost, quality and speed effects the most important output value of the process.
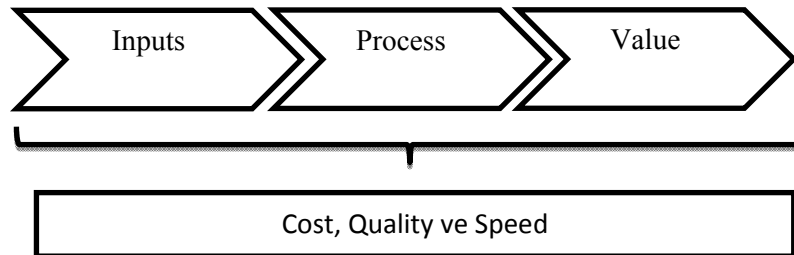
Figure 1: Proceess and Value

The thing creating the value is the process, effecting the process are the operations and effecting operations are the inputs. In order for the business to reach its aim, some operations increasing the value constantly and which are more effective and efficient according to the previous ones. The focus of the treatment works done by most businesses is to create a value. Should the business be alikened to a chain, each link represents a process (a function). Supply, production and distribution are the links which form the chain. In order to be effective in the chain management, the links need to be managed effectively. The weak link will prevent the other links and the chain in general from reaching its aim or will delay it. In brief, the performance of the business will be effected negatively In order to increase the performance of the business, weak links need to be strengthened. Strengthening the weak links will only be possible by determining the halting points of the process and removing them.

2 PROCESS IMPROVEMENT

Continuous upgrade, improvement, process improvement and reengineering are the notions being used substitute each other. All the businesses operating in a competitive environment need to modernize themselves about providing the perfectness continuously. Continuous improvement is a kind of strategy weapon which provides the business to be a competitive power against its rivals. Continuous improvement efforts both improve the current implementations and methods continuously and encourage the improvement in the business (Ripley, 1996, p. 1). Furthermore, continuous improvement should be seen as a follower improvement in the representation of the value to the customer and improvement (Turney and Anderson, 1989, p. 38). Conntinuous improvement in general meaning (Lenhardt and Colton, 2003, p. 46) are practices for:

  (1) Decreasing the cost of the products
  (2) Improving the quality of the products
  (3) Decreasing the time spent for process

Continuous improvement, is valid not only the processes forming the businesses but for every level. In business improvement by continuous improvement, focusing on the process, not the result, is in question. The understanding of focusing on the process actually means the operations forming the process. If the enhancement of the results is desired, improvement of

the processes affecting the results is a must. In order to improve the process, before anything else, process and operations taking place in the process should be defined and analyzed.
In short, continuous improvement is a device which provides customers to be served a better product and service and the business to be more powerful in a competitive environment and continuous improvement practises should be started at operation level.

Continuous improvement expresses the necessity of continuous learning and an innovative understanding of system in order to provide perfection in all the processes (production, engineering, arketing and accounts) of the business and in these processes the following works for the continuous improvement should be realized (Turney and Anderson, 1989, p. 38):

- Some works for the perfection in the production, improvement in the quality, decrease in the inventory level, on time production of tje products wanted by the customer, reducing the costs by decreasing production losses at a minimum level are needed.
- Perfection in the engineering requires the design of some products which are simplified, provide continuous improvement and use common parts. Simplified designs decrease the production time and inventory level.
- Perfection in marketing focuses on the understanding of customer needs and fulfill these needs in a cost effective system. The function of the marketing is to provide competitive advantages by reduce in the cost besided the improvement in the flexibility.
- Accounts should also be a side in the continuous improvement works. Especially it has a role of supporting the continuous improvement works in the other areas such as production, engineering and marketing. Besides, it has to make reports which shows the effects of the continuous improvement works on the performance of the business with financial and nonfinancial indicators.

3   THE REASONS WHY PROCESS IMPROVEMENT IS REALIZED

Contracting product lives, changing customer needs and expectations, faster entrance of the new rivals to the market are the main determiners of the electronic trade competitive market. The business has two alternatives: continuing or pulling out of the market. In order to prefer to continue; that is to be a competitive power, not only adapting to necessities of the market, but also being different in the market is necessary. Surely there are a lot of elements causing the business to realize process improvement; reducing the costs, increasing the efficiency, quality, decrasing the amount of loss, failback, enhancing the efficiency of the process, speed etc. Briefly, in order to strengthen the element affecting the competitive power of the business positively and reduce or remove the ones affecting them negatively process improvement is reqired.There are internal and external factors (Chan and Peel, 1998, p. 45) which cause the business to realize process improvement. These factors are shown in figure 2.

4   PROCESS VALUE ANALYSIS

Process value analysis is a device which enables continuous improvement works to ve examined and analyzed. Process value analysis is a method which searches ways to improve the process by analyzing operations in a certain process and to reduce costs. In this method, the in put use and factors causing the cost. Process value analysis is based on an understanding that cost emerges during the use of production input. For this reason, efforts for managing and reducing the costs must be realized during the operation and process level. Costs are calculated by taking inputs used in the process, intensity of the process, stream

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mechanism, stream flexibility and similar properties into account (Ostrenga and Probst, 1992, p. 2).
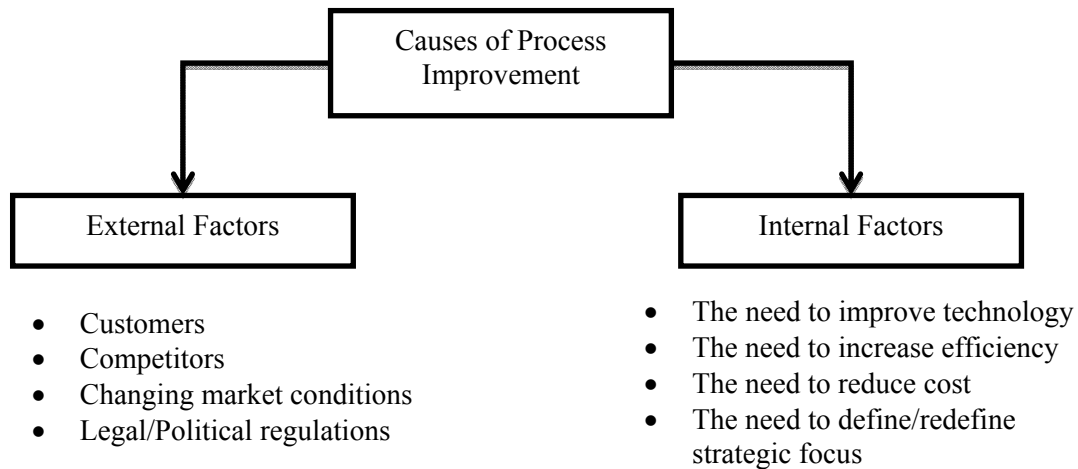
Figure 2: Causes Of Process Improvements

Process value analysis enables not only the ones in the process, but also the operations taking place in the sub and top components to be analyzed. Process value analysis is the entire of all the operations of the analysis and definition of certain processes in a business. These processes consists of certain operations and the analsis of these operations offer a chance to reduce the costs and increase the value. Process value analysis increase the reciprocal dependency among the operations in the process. The analysis of this reciprocal dependancy enables the events which actuates the business process to be identified. By keeping the events actuating the business process under control, the costs of the operations will be kept under control as well.

The analysis of the operains necessary for the production of an output systematically constitutes the basic structure of the process value analysis. Process value analysis defines all the operations taking place in the production of a product and its presentation to the customer and analyzes these operations from certain points. Process value analysis forms the main structure when the same understanding and basic business logic is implemented. Process value analysis is eminently valid method for analysing the cost structıre of the business. This method, helps the managers understand the systems of production and cost (O'Guin, 1990, p. 54).

The ways that a product follows has different processes. A number of input shaping operations and outputs take place in each process. Product costs and valid performance standarts should reflect the difference in the operations used to support each par tor product. By force of the understanding of an effective cost management of the businesses, the structure of the process value analysis should be formed. In this structure to be formed, following stages should be followed:
  (1) Preparation of the process stream diagram
  (2) Determining whether the operations are necessary or not
  (3) Determining whether the operations are creating added value or not
  (4) Forming a matrix about the process analysis by combining the 2nd and the 3rd stages
  (5) Testing the continuous improvement works

5   VALUE ADDED ANALYSIS

The process consists of different operations. Managers should apply a neccessity analysis to determine whether these operations are necessary from the pint of process. 1. Analysis in the time frame 2. Analysis in the types of operations. In order to complete the production a number of operations must be realized all together. However, whatever type of operation it is, it must be completed in a standart period of time settled. Should an operation be realized over the settled period of time, while standart time period of its total period of time is a necessary operation, the period of time which is over the standard time is an unnecessary operation. The analysis which is carried out in the type of operation, the reasons why these operations are realized must be based on. Namely, activities such as waiting, delay, producing more than necessary and reprocessing are the unnecessary activities for completing the production. These types are the negative indicators of the operability and efficiency of the production process.

Besides, whether each operation in the process create added value by being subject to added value analysis. While practising this analysis a manager should ask herself this question: Does a removal of a stage or an operation cause our customers ' satisfaction level to decrease? If the answer is no, reducing the treatment of the excessive amount of material, unneeded adjustments or the inventories wouldn't decrease the satisfaction of the customer, on the contrary as it enables a fadter delivery there would be an increase in the level of customer satisfaction. The activities during the process must be analyzed for whether they added value to the process output or not. The most important indicators in this analysis are the stage in the process and its positive and negative effects on the level of customer satisfaction level. Customer is not only the user of the end product. It must not be forgotten that the next stage in the process is also the customer.

Should the activities used by the customer and during the production of the products and take place in the process cause a rise in the satisfaction of the customer, they are the ones which create added value, if it cause customer satisfaction to decrease they are those which do not create added value. It is concluded that when the operation, examining, transportation, waiting and inventory activities are examined, it is understood that the activities do not create added value (Polimeni et al., 1992, p. 446).The activities creating added value is adding a value to the product whşch the customer has wanted, while the activities not creating added value cause time spent and cost to rise, however, it does not add value to the product from the point of the customer. Certain activities effect the cost and the performance of the process. By taking these activities under control costs are also taken under control. The use of excessive amount of input , cause the cost of the products not dreating added value and accorigly the product cost to increase. Removal of these activities would cause the expenses to decrease and the competitive position of the business would get stronger (Forrest, 1994, p. 313). So as to control and decrease the cost of the products produced during the process, the following processes must be realized respectively:

- The definition of the activities which add or do not add value to the products
- Some work for reducing and removing the activities which do not create added value
- The use of added value activities effectively

Different activities are realized during the processi these activities differ according to the product to be produced and this difference is reflected in the input use of the activities. These differences must be analyzed and associated with the product costs. The activities which are

previously classified according to the necessity analysis, are classified in chart to in terms of creating added value.

As it is seen, all the activitşes except for the operation activity do not add value to the process and the product and cause costs to increase. The researches done show that 10% of the activities in the process create added value on the product, the 90 % part do not create added value at all (Barfield et al., 2004, p. 24). The most important point of these researches which must be percieved by the business management, the necessity of focusing on the activities realized before and after the machinery rather than the activities realized on the machinery.

Table 1: Matrix of Activities

Activities	Necessary	Non-Necessary	Value-Added	Non-Value-Added
Operation	✓		✓	
Transport	✓			✓
Waiting		✓		✓
Control	✓			✓
Stockholding	✓			✓
Re-work		✓		✓

The activities in the process analysis, are classified according to the principals of "necessity" and "creating added value "
- Activities which are necessary and create added value
- Activities which are necessary but do not create added value
- Activities which are not necesary but create added value
- Activities which are not necessary and do not create added value

This classification is shown in table 2 as a 2x2 matrix.

Table 2: Classification of Activities by Managerial Perspective (Surendra et al., 2006, p. 19)

	Value-Added	Non Value-Added
Necessary	*Strategical* **A** Improve	*Managerial* **B** Decrease
Unnecessary	*Technical* **C** Decrease	**D** Eliminate

The business managers are needed to manage these activities according to the classification. In order to provide an effective process management and customer satisfaction, the activity groups in the matrix must be managed by being handled in a different way.

The activities in the A group are classified as strategic activities when they are considered in a managertal point of view for business. Business management is needed to give more importance to this type of activity in which added value is created. Management must be aware of the fact that if these activites were not realized, there would not be production and naturally their effects to the business.

The activities in group B must be considered technically. These types of activies are needed to be reduced, or more precisely used in the most appropriate way. Especially, if the rotations in the production process and transition activities among the parties were done different from the essential one, production time would get longer and thus, the production parties would have more costs because of the more use of input. In this activity group suitability must be based on (Surendra et al., 2006, p. 16).

In grop C, the activities which do not create added value but essential for the completion of the production. The activities in this group are classified as managerial activities. The complete removal of these activities cause process operability to end, in other words, production to halt. The ways to decrease this kind of activities must be searched. The business management, must especially focus on the optimization in these kinds of operation. For instance, the advantages which enable automobile spare parts produced in to parties to be produces in a single party in month. The activities in group D are the ones which must be removed completely. They are those which are not essential for the process, do not create added value for the product, cause an increase in the costs, extend the production and delivery time, decrease the customer satisfaction level. If the business management aims to decrease the costs, it must not give credence to activities in group D and take some steps to prevent these activities (education, specialization, equipmant support etc.).

6   PERFORMANCE

The aim of the process improvement works fort he businesses to obtain more output with the same amount of input comparing top re-improvement or the use of fewer input to reach the same amount of Both of these would only be possible by deacreasing or removing the activities not creating added value in the process.

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Revenues 5%-23%		Inventory 20%-52%
Blue-Collar Productivity 5%-25%		Inviseble Inventory 20%-60%
White-Collar Productivity 20%-110%	Total Cycle Time 30%-70% reduction	Depreciation 10%-32%
Time-to-Market 20%-70%		Scrap 20%-82%
Return on Assets 20%-110%		Delivery Lead Times 30%-70%
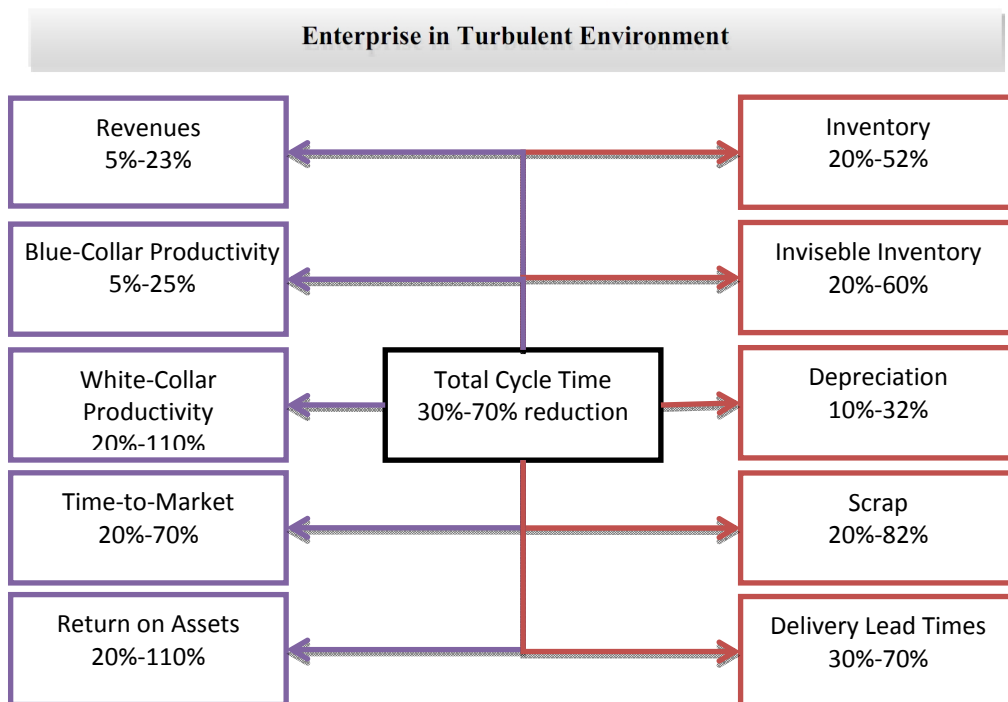
Figure 3: Business Perfomance Improvement by Total Cycle Time Reduction Programme
(Thomas, 1990; Towill, 2001, p. 14)

We know that process improvement works are realized to improve the performance of the business The aim is to reduce the costs under the main titles, enhance the quality and speed. As a result of the process improvement projects, an increase in the incomes, efficiency, efficient use of the assets and in time delivery to rthe customer, on the other hand a decrease in the inventory, cost of keeping inventory, losses, mistakes and the costs emerges. The results (Towill, 2001, pp. 14–15) of the total cycle time reduction programme are shown in figure 3. As a result of the process improvement, a decrease in the cost and an increase in sales of the business. Thus, the profit of the business and accordingly its value increases.

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Table 3: Process Improvement's Effects On Firms Performance

	Before	After	Differrence
Demand amount	200.000	200.000	0,00%
Total Fixed Cost	900.000	900.000	0,00%
Total Variable Cost	1.800.000	1.800.000	0,00%
Wastage_%	**10%**	**3,00%**	**70,00%**
Proces improvement's effects on sales quantity			
Salable product amount	180.000	194.000	7,78%
Defect amount	20.000	6.000	70,00%
Proces improvement's effects on variable cost			
Unit varibale cost_by demand	9,00	9,00	0,00%
Unit varibale cost_by salable	10,00	9,28	7,22%
Defect's effects on unit varible cost	1,00	0,28	72,16%
Proces improvement's effects on fixed cost			
Unit fixed cost_by demand	4,50	4,50	0,00%
Unit fixed cost_by salable	5,00	4,64	7,22%
Defect's effects on unit fixed cost	0,50	0,14	72,16%
Proces improvement's effects on unit profit			
Price	17,00	17,00	0,00%
Unit profit_by deman prouduct's cost	3,50	3,50	0,00%
Unit profit_by salable prouduct's cost	2,00	3,08	54,12%
Defect's effects on unit profit	1,50	0,42	72,16%
Proces improvement's effects on total profit			
Total profit by demand unit	700.000	700.000	0,00%
Total profit by salable unit	360.000	598.000	66,11%
Total wastage effect's on total profit	340.000	102.000	70,00%
Total Assets	29.000	29.000	0,00%
Total capital	14.000	14.000	0,00%
Proces improvement's effects on business perfomance			
Sales	3.060.000	3.298.000	7,78%
Total Profit	360.000	598.000	66,11%
Break Even Point_unit	128.571	116.555	9,35%
Break Even Point_Sales	2.185.714	1.981.442	9,35%
Sales Profitabilty	11,76%	18,13%	54,12%
Return on assets	105,52	113,72	7,78%

After the process improvement practises, the performance of the business (Kaygusuz, 2010, pp. 45–53) is examined in terms of the variables as sales, cost, profit and return on assets. As a result of the process improvement the loss rate of the decreased from 10% to %3 and this improement effects' on business performance is shown in table 3.

As shown in table 3, after process improvement, firm's wastage rate, decreased 10% to 3%. This improvement's results can be showed by using this different performance indicators. After process improvement, sales increased 7,78%, unit cost, decreased 7,72%. As a result of these, total profit increased 66,11, break even point decreased 9,35%, sales profitability increased 54,12%. At last, return on assets, increased 7,78%.

7   CONCLUSION

Process improvement is an ongoing journey. You may stop at some stations or have a break. But you must go on and don't come back. Todays' competitive environment, growing customer expectations and reduction in prices are the most important factors for business' wealth. There are two options for business: leave or continue. To be competitive, business must improve their process. But not only production, every process in the business. With process improvement, business continue to live on the profit area. Wherever you look, a weel-down business process improvement projects give the competitive power to business.

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AN OVERVIEW OF INSTITUTIONAL DEVELOPMENT AS A DETERMINANT OF FDI ATTRACTIVENESS IN THE SOUTHEASTERN EUROPE

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ABSTRACT

In the situation of the scarce domestic capital and investments, foreign direct investments (FDI) are needed to push the domestic economy and employment. They are usually seen as a solution to boost economic growth, but their effects on the domestic economy depend on the type of FDI and sectors where they go. The aim of this paper is to research institutional environment in the SEE countries: effectiveness of government, rule of law, protection of property rights, etc. The indicators about doing business, transition progress and governance are included in the analysis. Indicators of institutional development point many weaknesses in the SEE region: relatively high perception of corruption, poor development of institutions in terms of competitiveness, poor credit rating, poor efficiency of government, the rule of law, political stability. According to the analyzed parameters it can be concluded that the highest level of per capita FDI attracted Montenegro and Croatia, where it should be noted that the institutional arrangements in Montenegro becames more convenient for foreign investors in comparison to Croatia. Romania and Bulgaria as a member of the European Union recorded a number of deficiencies in the institutional development, that means that the EU membership was not solved their internal institutional weaknesses. At the same time it is also a lesson for other countries in the region that the issues of institutional arrangements is an internal matter and the accession to the EU (and the EU membership) can only help in building institutions, but the country remains responsible for the efficiency of their performances.

Keywords: FDI, Institutional development, SEE region

1 INTRODUCTION

In the situation of the scarce domestic capital and investments, foreign direct investments (FDI) are needed to push the domestic economy and employment. They are usually seen as a solution to boost economic growth, but their effects on the domestic economy depend on the type of FDI and sectors where they go. There are different implications of FDI on the export and import depending on its motives: horizontal FDI replaces (reduce) trade: instead of exports, companies begin production in a foreign country and thus have less trading costs (Horstmann and Markusen, 1992). The vertical FDI impact on the division of production in less intensive segments that use different factors of production - each segment is located in the country that is abundant in the required factor (Helpman, 1984). Since these parts should be connected, they affect the growth of trade. FDI may help to achieve modernization, industrial upgrading and improve productivity by importing foreign technologies, diffusing knowledge and Western best practices. The developing countries are often trying to attract more FDI with its own economic policies and incentives expecting their positive implication on the domestic economy.

There is a lot of analysis of the attractiveness of a particular country or a group of similar countries (Markusen, 1998; Markusen and Venables, 1998). Location determinants are very

broad concepts and they includes traditional factors such as natural resurces availability (prices, infrastructure), the size of the market (living standard, wages, production costs), macroeconomic environment (inflation, unemployment, interest rates, GDP growth rates) and institutional factors (property rights, FDI incentives, bilateral trade/investment agreements, taxes, etc).

In the case of developing countries the institutional framework is inevitable as a guarantee of market functioning. Institutional weaknesses, frequent changes in laws and inefficiency (slowness) of public administration may affect weak inflow or absence of FDI inflows. Inclusion of institutions in terms of FDI inflows is particularly important for emerging markets and developing countries, because developed countries have a strong institutional framework conducive to business development and market forces. The reliability and safety of institutions has emerged in the economic literature, in the first place as a catalyst for growth (Rodrik and Subramanian, 2003; Edison, 2003; Rodrik, 2004) and as an inward- FDI attractor mainly in transition economies (Pournarakis and Varsakelis, 2004; Bevan et al., 2004).

The countries of South and East Europe have been passed through the process of transition with liberalisation and privatisation where the foreign capital has played very important role. All the SEE countries were not equally successful in attracting foreign capital and their position depends on specific location characteristics of every particular country. Western Balkan states were faced with disintegration processes and lack of mutual cooperation till the 2000s. Because of this they lay behind in the amount of FDI inflows in comparison with CEE countries. The SEE countries have started to build their bilateral and regional cooperation (trade agreements) that have arise in CEFTA (Central European Free Trade Area), but despite this trade integration improvement, they are still lagging behind the CEE countries in the amount of FDI inflows. For example in the period 1993 till 2011 in the group of CEE countries Estonia has received 10 507 euros, Czech Republic 7418 euro and Hungary 5962 euro per inhabitant, while in the region of SEE countries Montenegro and Croatia have got the largest amount of FDI per inhabitant.

The region of SEE countries is not as large as CEE market (total population), so the market size cannot be the strongest influenced factor on FDI inflows. There can be the wage level, the infrastructure development, but also institutional framework which may be the reason for unsatisfactory amount of inward FDI.

New institutional economics extends economics with a social and legals norms that influence on the market functioning in the neoclassical framework. It is not opposite of the economics and it does not criticized economics; the idea is to include the efficiency of institutions in the analysis of market economies. It includes a variety of indicators such as: property rights, governance efficiency, social norm and capital, human assets, asymmetric information, strategic behaviour, bounded rationality, opportunism, adverse selection, moral hazard, contractual safeguards, surrounding uncertainty, monitoring costs, incentives to collude, hierarchical structures, bargaining strength, etc. Institutions may not be only considered as preconditions to FDI, they have been built in the process of transition; there is interaction between foreign investors and institutions in the host countries. Institutions, i.e. legal, political and administrative systems tend to be the internationally immobile framework whose costs determine in international attractiveness of a location.

A nation's institutional environment is the set of political, economic, social and legal conventions that establish the foundational basis for production and exchange (Oxley, 1999; Sobel, 2002).

The goal of this paper is to investigate the role of institutions in the attracting FDI inflows in the SEE region and to determine the relation among the institutional factors and the level of FDI inflows and stock. The paper is organized in 4 chapters. We follow with the literature review, third chapter is focused on research (methodology and results), and forth part is conclusion.

2   LITERATURE REVIEW

There are a lot of determinants that influence on country's abilities to attract foreign capital depending on the development level of a particular country. In the case of developing countries the most important factors are market size, production costs, factors availabilities and institutional framework regarding market functioning (property rights, administration, establishment of new firms, stimulations measures etc.). The significance of institutional factors are lower when we observe and analyse the FDI flows among developed countries because that countries already have institutional framework which is "invisible" regarding to long-term market oriented economies.

Dunning (1992) introduced an eclectic paradigm, known as the OLI paradigm pointing out three important elements that must be present in order to motivate the investors to invest in a particular country: ownership, location and internalization advantages. Among the location determinants we can point out the market size as one of the most significant variable in explanation FDI inflows in Central and East European (CEE) countries and this is also result of their integration in the EU.

The Dunning's location advantages include: the supply side (labour skills and costs, corporate taxation), the demand side (market size and growth) and the political and social infrastructure. Since that the initial Dunning's eclectic paradigm has not specifically included institutional factors, it was most focused on economic factors, Dunning (2006) pointed out that it is important to incorporate institutional factors in an extension of the model. It is further suggested that institutions affect all three components of the paradigm (Dunning and Lundan, 2008). During the 1990s privatization was a strong factor for receiving foreign capital (Bevan et al., 2004).

The focus in this paper will be on the determinants of FDI that influence on the investor´s decission about the location of investments. Institutional factors belong in the location characteristics of host countries and although they are important for building confidence and foreign investment, the analysis of other factors (market size, growth rates of GDP, labor costs, etc.) prevail in research of localization determinants.

What should be analyzed within the functioning of institutions? Whether only formal institutions and administrative actions or should we approached to institutions in a way to engage the informal elements that influence on the behavior and the non-cash operating results (Schmieding, 1993). Grogan and Moers (2001) consider institutions in terms of the degree of property rights, the effective application of law and regulation, and the degree of corruption. Such a definition may be covered by subjective data measuring the quality of institutions.

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Recent situation in the SEE region have highlighted the importance of an enabling institutional environment in reaping the maximum benefits from FDI inflows. In the last decades there are analysis of institutional importance in attracting and efficiency of foreign capital (Acemoglu and Johnson, 2005; IMF, 2003). It is difficult to approach to the institutions on the right way and to include all that belongs under that term. Daude and Stein (2007) found that poor institutions can act like a tax and therefore are a cost to FDI. Poor institutional quality can also increase the uncertainty associated with all types of investment, including FDI. Aizenman and Spiegel (2006) find that institutional efficiency is robustly correlated with the ratio of FDI to total domestic investment. Globerman and Shapiro (2002) find that the returns to good governance are greater for developing/transition economies as compared to others.

Rodrik and Subramanian (2003) distinguish four types of institutions: market creating institutions that protect property rights and make contracts fair and reliable; market regulating institutions that help to regulate market externalities, imperfect and asymmetric information or economic scales in sectors like transportation, telecommunication or environment; market stabilizing institutions that reduce macroeconomic instabilities (inflation, currency rate, balanced budget, fiscal rules) and prevent major crises and market legitimizing institutions that support social protection and manage social conflict. Kogut and Spicer (2002), and Stiglitz (1999) think that the establishment of new institutions is important as more conventional macroeconomic policy objectives. Kaufmann, Kraay and Mastruzzi (2004) include: political stability, government effectiveness, regulatory quality, rule of law and control of corruption, while La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999) include property rights index, business regulation index, corruption and bureaucratic delays.

Bénassy-Quéré et al. (2007) investigate the quality of institutions in home and host countries and found that institutional distance tends to reduce bilateral FDI flows. Bureaucracy, corruption, information, banking sector and legal institutions are important determinants of inward FDI but there is no general result applies to outward FDI.

Brunetti et al. (1997) has connected the differences in the degree of predictability of the institutional framework with the FDI inflows in countries in transition. The significant degree the differences in FDI across economies in transition could be explain with the expectation of (un)stable institutional framework.

Bissoon (2012) found that FDI inflows are significantly related to the quality of institutions. Besides macroeconomic stability, a good regulatory framework and political stability would have a positive impact on the FDI inflows of the 45 developing countries in the African, Latin American and Asian region.

Fabry and Zeghni (2006) has investigates the role of institutions in attracting FDI inflows in 11 post communist European economies (among others they have included also Croatia, Romania and Bulgaria). They created an analytical framework to understand the link between transition, institutions and FDI. The results of the empirical test confirm their expectation that FDI is sensitive to specific and local institutional arrangements.

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3 RESEARCH

3.1 Methodology

The question is how the measure institutional development. There are several institutions that assess the institutional development.

European Bank for Reconstruction and Development publicize the Transition Report where it follow up a large scale of indicators to assess the country's improvements in large scale privatization, small scale privatization, trade liberalization, price liberalization, competition policy, restructuring economies and the infrastructure development (roads, railways, telecommunication, water supply etc.). The scores are from 1 to 4+ and are based on an assessment of the size of the challenges in two components: market structure and market-supporting institutions and policies. They measure the transition gap (deviation from efficiency market structure). The score 1 to 2 means that there are a large transition gap, and score 4 or 4+ means that this gap is negligible (EBRD, 2012).

The Worldwide Governance Index consists of six dimensions: voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law and control of corruption. Political stability reflects perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. Government effectiveness reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Regulator quality reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Rule of law Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Control of corruption reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. The data are estimation of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance) (World Bank, 2012b).

The Transparency International measures the level of corruption in public sector and assess Corruption Perception Index (CPI) starting from 1995. In the last report it was included 183 contries. It is a composite index, a combination of polls, drawing on corruption-related data collected by a variety of reputable institutions. The CPI reflects the views of observers from around the world, including experts living and working in the countries/territories evaluated. A scale of 0 – 10 is applyed to measure the perception of corruption, where 0 means that a country is perceived as highly corrupt and 10 means that a country is perceived as very clean.

The World Bank researches the enterprise environment and creates the Doing Business index which provides objective measures of business regulations for local firms in 185 economies and selected cities at the subnational level. It includes 10 areas of business regulation, such as starting a business, resolving insolvency and trading across borders (World Bank, 2012b).

The World Economic Forum is one a key institutions that observe countries competitiveness. Competitiveness is a very compex and includes twelve groups of determinants such as

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infrastructure, primary education, secondary school enrolment, efficiency of (goods and labour) markets, innovation, etc. The institutional develpment is the first determinant and it belongs to basic reqirements. It is determined by the legal and administrative framework within which individuals, firms, and governments interact to generate wealth. The importance of institutions is growing in the crisis situation and in the process of recovery, but also institutional development is more important in developing and emerging economies (WEF, 2012).

UNCTAD published FDI Attraction, Potential and Contribution Index from 2002 in the World Investment Report. The Inward FDI Attraction Index ranks countries by the FDI they receive in absolute terms and relative to their economic size. It is the average of a country's rankings in FDI inflows and in FDI inflows as a share of GDP (UNCTAD, 2012).

3.2   Results

According to these international organizations below are presented and analyzed selected indicators of the institutional environment in the SEE countries. Given the different methodologies, and the number of countries taken in the analysis, there are limitations in mutual comparisons of the results, but we can track the changes that have occurred over time.

The FIAS (2007) survey about attractiveness of SEE region conclude that the best performers are Croatia, Romania and Bulgaria and that the other countires are lagging behind because of a lack in business environment stability, infrastructure reliability and a low perspective to became the EU member states. It was the situation five years ago and furher data will show if the situation is changed and what are the causes of changes.

Table 1: FDI inflows, FDI inward stock and FDI per capita in the SEE region (UNCTAD, 2012)

Countries	FDI inflows in millions of dollars						FDI inward stock	FDI stock per capita	FDI in % of GDP
	2006	2007	2008	2009	2010	2011	2011	2011	2011
Albania	324	659	974	996	1051	1031	4701	1460	36
B&H	555	1819	1002	251	230	435	6719	1748	37
Bulgaria	7805	12389	9855	3385	1601	1864	47653	6469	89
Croatia	3468	4997	6180	3355	394	1494	30883	6963	49
Macedonia	433	693	586	201	211	422	4728	2295	44
Montenegro	622	934	960	1527	760	58	5803	9360	128
Romania	11367	9921	13909	4844	2940	2670	70328	3693	37
Serbia	4256	3439	2955	1959	1329	2709	22872	3142	53

From Table 1 we can point out that the Romania and Bulgaria have collected the largest amount of inward FDI stock while Montenegro and Croatia have the highest level of FDI stock per capita (which is better measure than absolute terms) and Montenegro has the highest degree of FDI intensity.

Table 2: FDI institutional environment in SEE countries (World Bank, 2012a; EBRD, 2012; TI, 2012; WEF, 2012; UNCTAD, 2012)

	Standard & Poor	Profit tax rate in %	GCI-Institutions Rank	FDI Attraction Index (rank)		Doing Business World Bank (Rank)	Corruption perception index (scores)	
	February 2012	2012	2012-13	2005	2011	2013	2005	2011
Albania	B+ stable	10	84	108	40	85	2.4	3.1
B&H	B negative	10	85	75	150	126	2.9	3.2
Bulgaria	BBB stable	10	108	6	45	66	4.0	3.3
Croatia*	BB+ stable	20	98	45	84	84	3.4	4.0
Macedonia	BB stable	10	78	...	...	23	2.7	3.9
Montenegro	BB negative	9	44	56	20	51	2.8	4.0
Romania	BB+ stable	16	116	10	88	72	3.0	3.6
Serbia	BB stable	10	130	37	50	86	2.8	3.3

*Legend: BBB- or higher is OK; BB+ or below („junk" bonds)- very speculative grade. * Data for Croatia are for December 14, 2012.*

Corruption perception index: A country/territory's score indicates the perceived level of public sector corruption there on a scale of 0 - 10, where 0 means that a country is perceived as highly corrupt and 10 means that a country is perceived as very clean. Global Competitiveness Index is calculated for 142 countries in 2012–2013.

Tables 2 and 3 provide institutional determinants of SEE region. There aren some common characteristics for SEE countries: all countries (except Bulgaria) have very speculative credit rating, all countries have low level of CPI that means that perception of corruption is relatively high, they also have achieved very bad institutional rank accordig to the Global Competitiveness Index (GCI). There are also differences among countries: Croatia has the highest level of profit tax rate and it is twice higher than the level of most of the SEE countries (which has rate of 10%). Total tax rate (as % of profit) is the highest in Romania, Albania and in Croatia and all countries except Croatia has reduced (significantly) the tax burden in the period frm 2005 to 2013. Montenegro has achieved the best rank in the GCI-Institutions, FDI Attraction Index, it has the lowest profit tax rate and it has the highest FDI intensity.

Starting a business is the easiest in Macedonia and Albania and registering property in Serbia and Bulgaria (the difference in time period for registering the property among the Croatia and Serbia is 10 times). Croatia has a relative disadvantage in the strenght of investors protection where it takes the scores 4 and it is the worst position among the SEE countries. Regarding Worldwide governance indicators the rule of law and control of corruption have a negative sign for all countries for the period 1996-2011 and Albania, Bosnia and Herzegovina and Serbia have a negative average values for all indicators that means their performance are weak. The best scores have Bulgaria and Croatia in the areas of government effectiveness, political stability and regulatory quality.

Table 3: Some Doing Business indicators for SEE countries and Global Governance Indicators (World Bank, 2012a; World Bank, 2012b)

	Starting a business (days)		Registering property (days)		Strenght of investors protection (0-10)		Total tax rate (% of profit)		Worldwide governance indicators (average 1996-2011)				
	2005	2013	2005	2013	2005	2013	2005	2013	Government effectiveness	Rule of law	Political stability	Regulatory quality	Control of corruption
Albania	41	4	42	33	2.7	7.3	58.2	38.7	-0.50	-0.79	-0.35	-0.09	-0.74
B&H	12	12	331	25	5.0	5.0	43.2	24.1	-0.80	-0.49	-0.52	-0.37	-0.33
Bulgaria	32	18	19	15	6.0	6.0	46.0	28.7	0.01	-0.18	0.27	0.49	-0.2
Croatia	29	9	956	104	4.0	4.0	32.5	32.8	0.43	-0.04	0.42	0.35	-0.07
Macedonia	48	2	74	40	5.0	7.3	21.6	9.4	-0.30	-0.43	-0.71	0.01	-0.45
Montenegro	...	10	...	71	6.3	6.3	31.6	22.3	0.03	-0.09	0.48	-0,13	-0.21
Romania	28	10	77	26	5.7	6.0	57.2	44.2	-0.30	-0.1	0.19	0.32	-0.28
Serbia	56	12	186	11	5.3	5.3	35.8	34.0	-0.40	-0.78	-0.81	-0.46	-0.55

4 CONCLUSION

Institutional development is an important determinant of attracting foreign investment in developing countries, particularly in countries in transition. The SEE region can be attractive for foreign investors because of its location advantages, and only partly because of the size of the market. Monitoring of FDI flows reveals that the SEE countries have received significantly less FDI than CEE countries which could be partly justified by their subsequent involvement in international financial flows, while simultaneously CEE countries become full members of the EU, which gave a further positive impetus to foreign investment inflows. Analysis of institutional development is very complex and there are several international organizations that monitor various aspects of the institutional environment using a different methodology (statistics, surveys of businesses).

Indicators of institutional development point many weaknesses in the SEE region: relatively high perception of corruption, poor development of institutions in terms of competitiveness, poor credit rating, poor efficiency of government, the rule of law, political stability. It can not be singled out no country for which we could say that it is satisfactory institutionally regulated, but it is interesting to note the differences in the institutional system of the countries where we can follow weaknesses in Croatia in segments: registering property, strength protection of investors, overall tax rate (and profit rate) and the FDI attraction index, while in Montenegro: the lowest corporate tax rate in the region, the best ranking in the GCI-Institutions, the best position towards FDI attraction index (with a weak rule of law, regulatory quality and control of corruption). According to the analyzed parameters it can be concluded that the highest level of per capita FDI attracted Montenegro and Croatia, where it should be noted that the institutional arrangements in Montenegro becames more convenient for foreign investors in comparison to Croatia.

It is interesting that Romania and Bulgaria as a member of the European Union recorded a number of deficiencies in the institutional development: the worst ranking (among SEE countries) in the GCI Institutions, worsening of FDI attraction index, low rank according to the Doing Business indicators and still relatively high perception of corruption. It means that the EU membership was not solved their internal institutional weaknesses. At the same time it is also a lesson for other countries in the region that the issues of institutional arrangements is an internal matter and the accession to the EU (and the EU membership) can only help in building institutions and the country remains responsible for the efficiency of their performances.

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Enterprise in Turbulent Environment

EVALUATING THE IMPACT OF SELECTED MEASURES OF HUMAN RESOURCE MANAGEMENT

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ABSTRACT
Human resource management is a very difficult task. It is difficult to introduce new things that employees are not ready, they do not want or can not handle. Customizing is our main task, but our experience shows that in practice this is not so. As the director of a small company I have since 2010 gradually introduced new instruments in the research environment BDC - Tim d.o.o. The results of internal surveys have been very satisfactory, but the situation after the introduction of instruments and changing working environment is analyzed and assessed zero. Therefore, the aim of the study was to assess the impact of the effects introduced instruments of human resource management and determine acceptance of the new proposals. The survey was conducted on a sample of employees in the BDC - Tim d.o.o. the questionnaire and group interviews. Analysis of the results showed that the employees are very satisfied with the introduction of standing instruments of human resource management, they do not agree with the introduction of design skills and implementation of annual interviews.

Keywords: Organizational climate, Organizational culture, Organizational philosophy

1 INTRODUCTION
Companies in today's fast-growing market are increasingly choosing systematic development of human resources, which is also the purpose of human resource development practice in our following research environment. Our focus is primarily on the education and training of employees, motivation, career building and awareness of their own ability and also on the responsibility to use their knowledge and activity to contribute to the success of our company. If we, as firm, want to have favorable business results, it is not enough to invest in a technology of the company, but there are also investments needed in human resources. Being aware of that this is precisely what we do in our private sector.

Human resource management is a special field of management in which human resources are optimized in a way to adjust goals and needs of the company and employees (Azman, 1993, p. 39).

DeSimone and Harris (1994, p. 96) define human resource management as an efficient use of employees to achieve goals of the organization. They divide functions of human resources management into:
- primary - recruiting and selection of cadre, salaries and benefits, cadre planning, relations between employees and development of human resource;
- secondary - the establishment of organizational goals, forming of the research informing system, forming work activities.

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Human Resource Management (HRM - Human Resources Management) is an organizational function which deals with issues related to people such as compensation, hiring, success management, organization, development, safety, wellness, advantages, employee motivation, communication with management and staff training (McNamara, 2005, p. 1).

For a more detailed explanation of given situation we want to process, here are some facts and information: Until 2009 BDC - Tim d.o.o. was stationed in the old tenement house and included five employees. In 2009 we decided to do an internal investigation to study the degree of employee satisfaction related to organizational climate.

The results showed satisfaction with organizational climate of our organization (score 3−4; maximum possible score was 5), satisfaction with salary (score 3), dissatisfaction with working premises and offices (score 2); dissatisfaction with informal gatherings (picnics, trips, social events) (score 2−3).

In 2010, based on the internal research mentioned above, we decided to move to a new and bigger location. Within 6 months we also realized some short-term and long-term goals and used the instruments of human resource management; we renovated offices and working premises and ergonomically adapted them to a given work, set up a regular daily meetings (informal), mandatory weekly team meetings, monthly planning activities, organized a trip with employees and their families, organized a visit from Santa Claus for the children of employees and provide gifts, increased base salary and ensure extra stimulation and motivation by adding an additional payment based on the sale (sales commission).

The central problem in this paper is the evaluation of the effects of initiated instruments. The purpose is also to evaluate the introduction of instruments which are already initiated in human resource management. For yet unrealized instruments we wanted to determine whether employees were willing to accept them.

The goal of the paper is to determine which instruments introduced to staff met with a positive response and which not, as this could be a cue for subsequent treatment of company management in relationship with employees and organizational climate.

It is wrong to think the financial stimulation is the only or the most important instrument for increasing employee loyalty to the company and also to improve productivity.

Systems of motivation and rewards have been studied by numerous authors; Warr (in Robertson, Smith and Cooper, 1994, p. 23) interviewed employees in the UK. It was discovered more than half of men and women would be employed despite assured financial provision. Non-financial reward of the salespeople in Japan was discovered to be the leading reward (Takahashi, 2006, p. 17; Watanabe, 2000, p. 58). In the European Union Gibbson and Waldman (1999, p. 81) and Ward with his co-workers (1992, p. 17) studied the employee motivation and reward. Their main goal was to discover which management methods have the most impact on employees and what has the most positive effect on them.

Based on the problem in this paper we are setting the following hypotheses: R. H. 1: We assume the introduced instruments of human resources management were understood as a progress of the organization.

R. H. 2: Employees will fully accept suggestions for new instruments for managing human resources.
- ✓ R. H. 2. 1: clearness and introduction of competency model,
- ✓ R. H. 2. 2: Annual interviews,
- ✓ R. H. 2. 3: agreeing with strategy, vision and goals of the organization.

2 METHODOLOGY

Searching answers to the questions we examined primary and secondary data sources. In the theoretical part we used the deductive research approach. We used content analysis method, synthesis method and compilation method. Reading relevant literature, we searched for topics that could be connected to the problem discussed.

Empirical part is based on exploring relationship between employees and stated executed measures. The study included the population of all employees of our company and was conducted in September 2012, hereinafter referred to as "study 2012".

In the study 2012 we used: individual and group interviews with employees, questionnaire method, which contained a total of 10 questions, content analysis method, records of written reactions of employees ...

Obtained data were statistically analyzed using Excel, SPSS.

3 RESULTS

3.1 We assume the introduced instruments of human resources management were understood as a progress of the organization

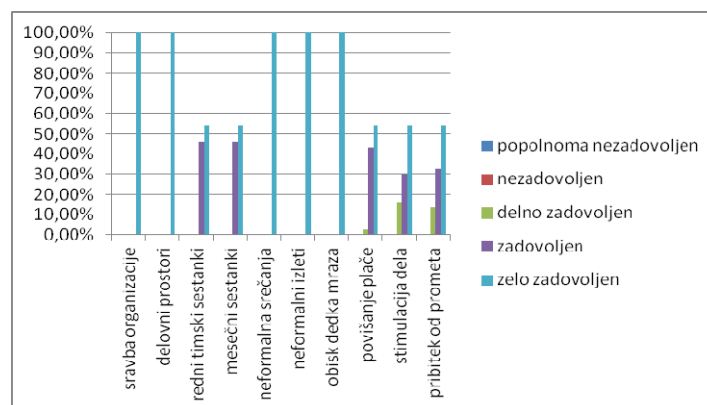*Chart 1: The result of tests of the population in terms of satisfaction with the arrangements in place (survey 2012)*

X axis: building of the organization, working premises, regular team meetings, monthly meetings, informal gatherings, informal trips, Santa Caluse visit, salary increase, work stimulation, sales commission

From top to botom: completely unsatisfied, unsatisfied, partly satisfied, satisfied, highly satisfied

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Respondents evaluated the building of the organization positively, 100% responded they were highly satisfied with the new building. According to the results new ergonomically designed work premises also gave 100% satisfaction and functional utility. The main emphasis of ergonomically designed working premises is on well-being of employees and preventing locomotor system disorders, which we cannot afford in private sector. 54.05% of the respondents were also highly satisfied with team and regular monthly meetings, the rest of them, 45.95%, were satisfied with them. I introduced regular team meetings and monthly meetings as soon as our organization moved to a new location, because I am aware of the fact the climate and culture are formed in the everyday contacts. If this is not fulfilled, the identification with the organization and its values decreases.

100% of respondents were highly satisfied with the informal meetings outside of company time, parties and Santa Claus visits, which I organized in 2010 for the first time. It included great gifts for all the children of employees and also animation with well-known entertainers. With the increase of the basic salary, work stimulation and motivation and adding sales commission more than half of the respondents, 54.05%, were satisfied. According to the results of the research we can reach the conclusion employees are mainly united about non material stimulation, while in terms of material stimulation (mainly financial reward) opinions seem to be divided. More than half of the participants positively welcomed this measures, but not entirely as other measures.

3.2 Employees will fully accept suggestions for new instruments for managing human resources

3.2.1 Clearness and introduction of competency model

Competencies are the ability to use knowledge, employee's abilities and skills to successfully complete tasks and duties, as defined in systematization of job positions. They serve as a basis for level of knowledge and skills standardization, that employee needs to have for a particular job position.

Table 1: Agreeing with the introduction of competency model (study 2012)

Statements	1 – completely disagree	2 – disagree	3 – partly agree	4 – agree	5 – completely agree	Everage value
I agree with the introduction of competency model	100 (37 %)	0	0	0	0	1

Table 2: Understanding the competency model (study 2012)

Statetments	1 – I do not understand at all	2 – I do not understand	3 – I partly understand	4 – I understand	5 – I completely understand	Average value
Presented competency model, its importance and role for the employee, as well as for the organization	0	0	9 (24,32 %)	11 (29,73 %)	17 (45, 95%)	4,22

Respondents state in 45.95% they understood the presented competency model completely, 32.43% understood it and 24.32% partially understood the model. Respondents do not agree with the introduction of competency model. We found reasons for the disagreement by performing a group interview.

The responses were:
- they do not care what we do, but everyone knows their job and tasks, so the competency model would remain only on paper due to this particular research.

3.2.2   Agreeing with performing annual interviews

Regular annual interviews bring many benefits and advantages for leadership and employees of the organization. Based on annual interviews employees can build and develop their personal, professional and work career, cooperating with company management. They can also express their opinions, positive or negative, and give suggestions.

Table 3: Agreeing with introduction and implementation of annual interviews (study 2012)

Statements	1 – I completely dissagree	2 – I do not agree	3 – I partly agree	4 – I agree	5 – I completely agree	Average value
Introduction and implementation of annual interviews		16 (43,24 %)	9 (24,32 %)	11 (29,73 %)	1 (2,70 %)	2,91

Table 3 shows respondents on average agree with the introduction of annual interviews, however, 43.24 % of them do not agree with the introduction of annual interviews disagree.

3.2.3   Agreeing with strategy, vision and goals of the organization

Culture and climate affect on realization of the strategy and achieving goals of the organization. The efficiency of organization or company in strategy realization and achieving its goals is a function of the involvement of employees in the realization and their participation. We are aware the cultural preconditions for effective realization of the organization strategy are fulfilled only in an organization, where the relationship between employees and managers are good and where the involvement of employees in decision making is high.

Table 4: Agreeing with strategy, vision and goals of the organization (study 2012)

Statements	1 – I completely dissagree	2 – I do not agree	3 – I partly agree	4 – I agree	5 – I completely agree	Average value
Strategy BDC - Tim d. o. o.	0	0	0	0	37 (100 %)	5
Vizion BDC - Tim d. o. o.	0	0	0	0	37 (100 %)	5
Goals BDC - Tim d. o. o.	0	0	0	0	37 (100 %)	5

The results presented in Table 4 clearly show employees completely agreed with the strategy, vision and goals of the organization. From this we can conclude employees are well aware of the strategy, vision and goals of the organization and can somehow relate to. They also had no comments on what could be added or excluded. Opinions were, and I quote, that it is all O. K., well-done and wisely written.

4   CONCLUSION

Unfortunately, there is still a common belief the financial measure is what needs the most attention in relationship with employees.

Most organizations in Slovenia include financial rewarding in their management systems. With this investigation we can confirm the potential advantages of the different systems of financial rewards on the basis of theory and empirical research cited by the working report of the European Commission (Commission Staff Working Paper: Financial Participation of Employees and the European Union):
-   greater involvement of employees based on better sense of affiliation to the company and also greater motivation to improve business results; thereby productivity increases and social tension decreases;
-   greater employee loyalty, which is highly aspired especially by high-tech companies;

Introduction of financial participation in companies is an effective tool which can help to (adapted from European Foundation for Improvement of Living and Working Conditions, 2004, p. 2):
-   motivate and reward employees for their contribution to the greater success of the company;
-   bring company goals closer to employees and help them understand what leads to higher efficiency of business;

- maintain key employees and/or employees who gained their specialized knowledge and experiences during the employment in the present company (a lot of time, effort and money was invested in their knowledge and experiences);
- attract highly skilled workforce;
- reduce marginal expenses of labor;
- strengthen team spirit.

Based on the assumption investing only in technology is really not enough, but you have to invest especially in human resources, it is very important to establish which way to invest and which measure is important for our employees.

The aim of this study was to evaluate the impact of implemented instruments of human resource management in the BDC - Tim d.o.o. organization. The research we performed showed satisfaction with established instruments of human resource management.

It is wrong to think only high salary is the measure which will make employees to use all their knowledge and energy for the benefit of the organization. The most important for employees are informal meetings outside the official time, parties, picnics, trips and gifts for their family. Based on the results of this research we can reach to the conclusion employees are mainly united about non material stimulation, while in terms of material stimulation (mainly financial reward) opinions seem to be divided.

According to the results, it would make sense to upgrade the study to the degree to find out why employees disagree with some organization measures and which measures are those. The answer may lie in lack of understanding and ignorance of those measures, or perhaps elsewhere.

We must not forget limitations of this research, which was done in this specific organization and therefore should not be generalized, as there can be differences in salary, stimulation, working environment, co-workers, and can vary from case to case.

A big advantage of this research is the fact we got answers which are specific to this organization and if we put the results of the study into practice, we can expect desired results. Because of that this study could perhaps be a great guidance for all leaders, especially in the private sector, where they are free to do their own research. Leaders in private sector can put some energy and especially finances to where they can actually expect the greatest results.

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CONTINUAL EDUCATION OF EMPLOYEES – PREREQUISITE FOR SUCCESSFUL COMPANY

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ABSTRACT
During the educational process, potential candidates and employers can't have all the practical knowledge and skills which the companies demand in their working. In these conditions the need of constant education of the employees is more than necessary.The training is a very expensive process which demands a lot time and money. Depending on the complexness of the working tasks, every company makes its own decision, if and what training the employees need. With the training of the employees, the quality of the work increases and the working results in the company are getting bigger. Following the employees characteristics, the manager team can easily make communication and also it can see the training needed for certain workplaces which is important for the realization of the business goals, the goals of certain people and the company goals in general. The technical and technological development in nowadays conditions, the globalization of the market and the struggle with the opponents, makes the training process and the upgrading of the employees, most valuable for the companies. Improving the working capacities of the employees we can gain improvement of the company characteristics as well.

Keywords: Companies, Employees, Specialization, Training

1 INTRODUCTION

Recources are the the key strategical factor in the internal soroundings in each company. Beside material, financial, informational, the human resources are also important piece in the staff potential in one company.

The qualifications needed of the staff employed, their knolidge and reliability to answer to a certain asignement, represents the post that leeds to success in one company.
Successful companies are those which admit the importance of their own employees and help them in any way to develop their potential with what they would bring the company up to a higher level.

There are big differences between capacities, experience and the caracter of employees, which shows that a constant education is needed, depending on individual capabilities that every employee poses.

Training and education of employees depending on the needs of the work place, could be achieved inside the company, outside through organising work meetings, seminars, conferences, symposiums and other formes.

The lenght and intensity of the trainings, mostly depends on the need, complexity of the work asignements and the finacial opportunity of the company as well.
Beside employees, the managers also have the need of a constant education, because, the true and real direction comes directly from them.

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With constant training the company gets well trained employees and good and successful managers as well, who can respond to any work tasks in any time, and who also bring success to the company.

2 THE NEED OF EDUCATION AND TRAINING OF THE EMPLOYEES

In developed countries , companies consider training in the line of most important functions of the management with human resources.

Knowledge, sklls, behaviour are conected to attitudes of one person towards work tasks as well as people with who enters in intepersonal relations to fulfil the asignement.

Training of the employees in one company is nedeed to achieve new knowledge, and positions in the future. This also spreds and increases the potencials and prepares for future work chalanges.

Training and education of employees also have their own specific content and each one of them can improve the results of the company, if the programes for that purpose are successfuly achieved.

The need of training and education is more neccessary in modern conditions of existance of a company.

3 A PROGRAM FOR THE EMPLOYEES TRAINING PROCESS

Constant education of employees in companies in the 21st century, when science and technologie are on a very high level, became one of the most important factors for human resource developement.

Estimating needs of training of employees as relevant and on schedule , it's neccessary, the human resources sector to have a program in advance just for training and education.
Preparing the annual program of nedeed training and education of employees, all the company units have to be included and to participate as well.

The base in preparing and developing the annual plan in one company should be the sectors' plans made by managers of the work units.

The managers from the sector units cooperate in organizing, preparing, giving positive or negative opinion for certain parts of the program, and they also participate in making decisions for or against this program to be accepted or rejected.

Training is a complex function which demands quality achievment of all activities.

The training program represents legal-institutional frame for quaity, constant, coordinated, effective, and efficiant trainings of the employees in the company.

The training program and improvement of employees has more important steps for successful achievement of the activities which in practice we see as related and they can be realized in the same time.

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3.1 Identifying the needs for training and improvement

The need for training should be diagnozed with analysis of the company results and the needs in future.

It is neccessary to identify in which mesure the company fulfils its goals and assignements and is this training process a big facotr for achieving better results in the company working. These training needs are always actual when there is a difference between the existing and needed level of knowledge of the employees of the company.

Outworking these differences between existing and needed knowledge, skills and behaviour,it can be achieved with a proper system of training wich can also give an answer to all the questions related to the knowledge needed and the people who should participate in it.

To respond to all this it is neccessary to make a detaled analysis of the needs in the company, the work places and the employees as well.

Every company should have its own strategy to identify the skills and knowledge neccessary which employees should have for every work place, so the working results would grow and become better.

Making a program wich will adjusted to their education and uears of work in the current workplace is absolutely neccessary.

Identifying the needs for training beside analysis of the workplaces and their professionality, it is also neccessary to make a detail analysis of the worker as a person (executor of a certain task).

This analysis would give the answer of the question, how the person fulfils the work given and the tasks as well, and to discover which knowledge , skills and capacities should be gained during the training process.

3.2 Training goals

Basic goal of each training is to point the knowledge and skills needed as well as the creative capacity of every person included in some specific work task.

Developpement and improving of knowledge and skills represent enlargementof working and creative capacityof each person.

One of the goals of constant trainings of the employees is the opportunity to trnasform the potential of every executor in certain working action.

3.3 Methods, organizing and achiievement of training

One very improtant factor for implementation of the emplloyees trainings, is in fact which method will be accepted in a specific case of an emplyee, for a groupe of employees as well as for whole company.

Method which are used in the employees training can't be categoricly detected as training methods, but mostly they are methods used in person developpement and are identified as training methods for improvement of employees.

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Bigger problem choosing between different trainning methods represents the decision which method would be proper in certain situation.

There is a big variety in methods wich are reachable for training on every level.

Some methods are older, but they are shown good and are still in practise. The technical and technological developpement, as well as the developpment of computer scinece make implamentation of some trainings more important, efficiant, and mora economical from traditional methods of training.

Between more important methods of training, developemet and improving of employees there were:
- introduction of working principals
- teaching
- counciling
- rotation on the workplace
- practical training on the workplace
- work education
- courses outside
- seminars
- computer programs
- video presentations
- conferences
- technical training, etc.

The realizaton of training methods for the employees, can be organized and performed in different ways depending on the size of the company, the number of employees, the period of employement, the place where the training takes place etc.

a) **Depending on the number of employees that should be included we can deffer: individual and training in groups**

With the individual training an individual could be trained and he can also gain a specific knowledge for executing a specific task which demands special qualifications and skills.

The individual training is usually performed in smaller companies with a small number of employees.

Depending on the complexity of the company work and the working assignements as well, the individual trainning can be performed inside the company with hlep from the colegues with a bigger work experience, and outside the company in case of a specific training for a specific task.

The training in groups provides teaching more peopple in the same time who work same or similar jobs in one company.

It doesn't matter if this training will be exploring, working in production or selling, every individual should give his own contribution and oppinion about the Basic and additional or special training.

b)   Depending on the knowledge acquired in certain area we can deffer:

With basic training employees gain basic knowledge about the work, needed for normal executing and starting the work tasks.

With the additional training employees spred their knowledge gained with the basic training. Depending on the workplace and the job they execute, additional improving of employees are performed trough specific seminars, symposiums, conferences, training in work teams inside and outside the company.

These trainings are neccessary for accountants whose work is submitted to law changes and procedures, teachers trainings, trainings in medicine, trainings in informatical technologie, etc.

c)   Depending on the time period we differ: Training before strarting the work process, training after accepting the work and functional training which lasts until the end of the work years

For some workplaces it is neccessary the future employee to posess certain qualifications, with what he can provide his own workplace. In fact these training are neccessary for specific workplaces which demand certain and specific skills and knowledge.

Training after accepting the job can include a larger spectar of trainings which employees need.

The need of this kind of training is identified with the start and introduction of certain work task. The manager of the sector in the company is the person who should point the need of additional training of employees.

In these cases managers who do have this kind of role, exchange their own knowledge and experience, and specify the needs for additional training of each employee.

The functional training during the work years is introduced to increase constant knowledge for improving capability and skills of employees.

This type of training should be introduced for certain work tasks where a specific experience is neccessary.

These type of trainings are usually introduced by experienced trainers.

d)   Depending on the place we can differ: training on the workplace and training out of the workplace

One of the most used trainings represents the one on the workplace itself. Some researches show that 90% of the trainings are on the workplace itself where the employees directly do their part of the working process.

Altough, these kind of trainings are used by a larger number of the companies, in the same time they are shown as very poor in practice. Failures are mostly about unsufficient training environment, a lack of good trainers, undefined criteria for implementation, etc.

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The only good thing for the company is the small expence for introduction of these trainings, and less absence of the employees which also implies double savings.

The trainings outside the company means learning trough practical courses, classic teaching, computer simulation, etc.

Implementation of trainings outside includes experts from different areas.
A big number of companies include candidates on specific courses at specific universities. Basicly these candidates are getting prepared for future managers or technical experts.

The advantage of the training outsidethe workplace is that the employees are out od the possible stress which the working process can cause on them, and in that way they couldn't be able to pay attention to the training process itself.

The negative side of all this is the great financial expence needed for implementation.

If we pay attention on getting quality and well trained staff, finaces shouldn't be any kind of obstacle in the realization of the trainings, because the knowledge gained will be introduced in the working process, and the success of the company will reach a very high level.

Simply by creating successful and quality employees a successful company could be created as well.

4   EVALUATION OF THE TRAINING EFFECTS

Organizing and projecting trainings means specifying activities included in the training itself, duration of the training and determination the exact activities that will be performed in the training.

A very important element in the introduction of the training is choosing the most efficient methods which on the other hand depends on the available means for that purpose, the number of participants, etc.

Avoiding or neglecting each element needed for implementation of the employees training which also means irrational spending of resources and low efficiency of the training introduced.

One the steps necessary for organizing and introducing the full training program is efficiency grade for implementation.

The employees' result grade should be obtained regularly

The main purpose is to appoint the good and the bad sides of every employee.

Summing up the effects of the training, the benefit for the company and the individual can be easily recognized.

Training as any other function should be evaluated so it effects can be easily seen.

The effects represent in a way the level how much the learning and improving programs influence on the employees workplace, their success, as well as the benefits of the training and development.

There are more accesses in evaluating trainings. The Kirkpatrick access is mostly implemented. He formed a four criteria model of evaluation of training.
- A grade for reactions of participants in trainings according to the content of the training itself
- A grade for the knowledge obtained in the training program implemented with the help of tests before and after the training program.

With this criterion the knowledge of the employees not involved in the program could be compared with the one of the individuals included in the training.
- A grade for the changes in the behavior of participants in the training if we know that these trainings often do cause changes in behavior to some individuals.
- A grade for the results gained which should influence the productivity, increasing quality of products, reducing expense and work absence, as well as returning the trainings investments.

This means that the benefits of the trained employees should be bigger than the expenses invested in their learning.

The benefits include higher income, increased productivity, increasing quality of the work and bigger satisfaction from the work as well.

A large number of authors dedicate special attention to the mark of valorization –the income of means inserted*

The result of the effect or the mark for the training results is most difficult to prepare. The heaviness sustains in analysis of the many marks which express results of the participants in the training.

Many exploring in the European countries show that the training programs different combinations of the methods presented should be used.

The purpose of this mark is to appoint if the means used and spent, give a certain income and how high this profit is.

In the company working where buyers' role is highest goal, successful employees are the most important capital ever.

5   CONCLUSION

"You are as good in the work as the people you have chosen to work for your company". To keep the level of successful working and constant increasing and improving, beside other conditions and activities, a special attention must be paid to trainings and improving of the employees.

For obtaining constant quality work the employees must have a constant training and improving.

Without appropriate training, knowledge and skills, employees fall into work, and they are even inefficient in the working process because training is only one of the factors which influence efficiency in executing the work tasks.

Training employees should be realized on a very high level of dedication, thoroughness and professionalism as well.

On a company level, training prepares employees for taking more complex work, with what, a possibility to change the work results could be provided.

Training and improving of employees represents a frame which is focused on organization skills, development of the employee through education, with what, long term needs of the company, individual goals in the career and the value of employees, could be provided.

Training is a very expensive process which demands time and money for realization. Bringing decisions, preparing good programs for the training process, and upgrading the skills and employees attitudes on every possible level, increase the efficiency in the company, and bring back the interests. This represents the only way to get the company to the top of success.

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ANALYSIS OF THE FUNCTIONING OF CLUSTERS IN POLAND[1]

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ABSTRACT
The cluster concept has gained special significance after the publication of the works of M. Porter "The Competitive Advantage of Nations"(1990). But the most popular definition of industrial cluster was formed eight years later, when he wrote that clusters are:"geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g. universities, standards agencies, trade associations) in a particular field that compete but also cooperate"(Porter, 1998, p. 197). A cluster as a regionally focused form of economic activity generates positive effects for business and the region. Global researchers suggest that clusters help to increase the innovation and competitiveness of the country in which they are located. Since the 90s clusters have become an increasingly important element of economic development and innovation strategy of the European Union and its Member States. In years 2007–2013, clusters are expected to one of the objectives of support for EU regional policy. EU funds destined for cluster initiatives will help to take concrete actions by entrepreneurs interested in the cluster activity. Poland has recently joined the countries interested in popularizing the idea of clusters. Some specialized cluster studies have been carried out in Poland identifying clusters. This article gives an overview on policy support, formation and the functioning of clusters in Poland.

Keywords: Cluster, Cluster policy, Initiatives, Poland

1   INTRODUCTION
The ability to compete in the national market and the flexibility of enterprises are becoming increasingly important in the face of the world economy. One way to strengthen the competitive position of companies is by exploitation of synergies resulting from the cooperation between enterprises in clusters.

Since 2000 there has been increased interest in Poland and cluster structures associated with such situations as:
- finding new solutions to improve the innovativeness of enterprises,
- preparations for Poland to join the European Union,
- development of information technology,
- Polish participation in the activities of various international organizations,
- striving enterprises to improve upon their competitiveness and increase innovation.

Poland ranks low is terms of competitiveness and innovation among international rankings. In the report Innovation Union Scoreboard 2011[2], Poland had been placed for "moderate

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innovative countries – catching up economies" (European Innovation Scoreboard 2011, p. 27), because our ranked performance indicators which have been taken into account in this study had below average. The average Summary Innovation Index for UE-27 countries was 0.533 but for Poland economy it was 0.304 in 2010 (chart 1).

The report said that in Poland we are relatively strong human resources, finances and support, firm investments. But level is still low in: innovative small and medium-sized enterprises, cooperation among businesses, level of entrepreneurship, and the amount of funding provided for research and development. Expenditures on research and development activity in Poland in 2010 were at the level of 0.68% of gross domestic products, but the average EU-27 counties level at was 2.01% of gross domestic products. On the other hand at the same time gross domestic products according to purchasing power parity per capita in PPS (current prices) was at 15300 €, but the average among the 27 countries EU was at 24 400 € (Statistical Yearbook of the Republic of Poland, 2011, p. 749−752).
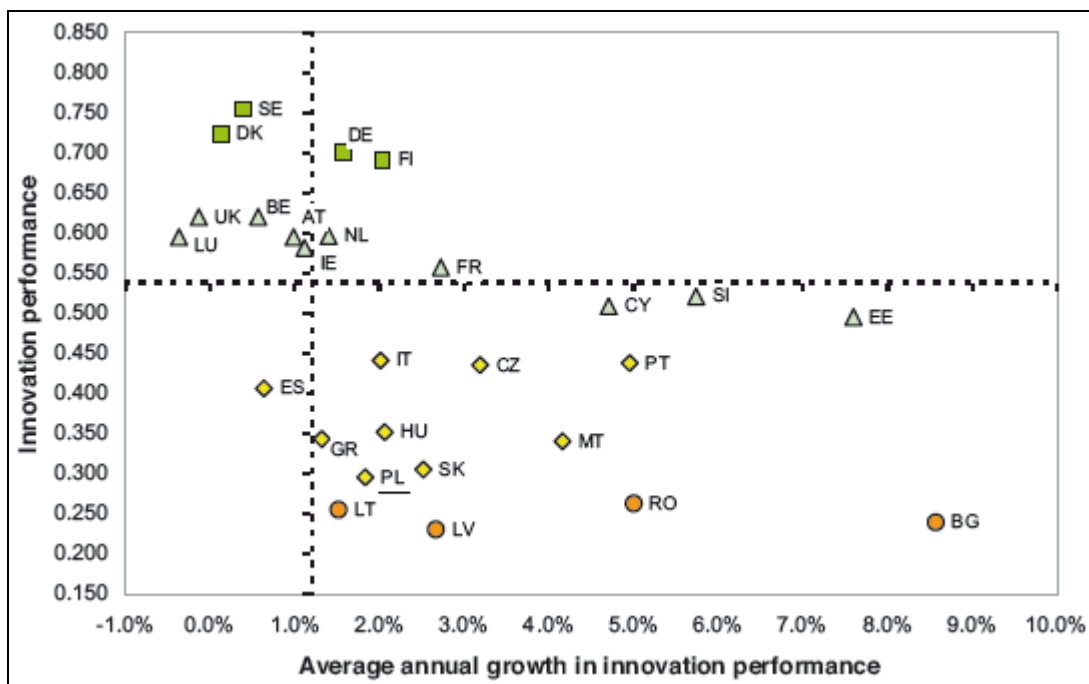
Chart 1: Convergence in innovation performance in EU-27 (www.proinno-europe.eu/metrics)

Poland ranked 39[th] among 139 countries in the Global Competitiveness Report 2010–2011, which was drawn up by the World Economic Forum. This is a good result when compared against the world at large, but not outstanding among European countries. From 2003 on, we had successively moved up and prooven our position. The following European country scored higher competitive positions than Poland: Sweden (2[th]), Germany (5[th]), Finland (7[th]), Netherlands (8[th]), Denmark (9[th]), United Kingdom (12[th]), France (15[th]), Austria (18[th]), Belgium (19[th]), Luxemburg (20[th]), Ireland (29[th]), Estonia (33[th]), Czech Republic (36[th]) (The Global Competitiveness Report 2010–2011, p. 25). The report emphasized the poor technical infrastructure in Poland, the low degree of cooperation between the public and private sectors

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[2] The level of innovation based on Summary Innovation Index, which is calculated as a weighted average of 29 indicators of partial to the EU-27 countries and Croatia, Turkey, Iceland, Norway, Switzerland, the U.S. and Japan.

as well as of research and development, and business environment institution quality (chart 2). The authors suggest that Poland should now focus its efforts on creating conditions for the development of entrepreneurship and innovation. Therefore the development of an appropriate policy taking into account the cluster is of special importance. Policies conducive to the development of clusters and, - enterprises can help improve the innovative and competitive position of the Polish economy within EU countries and worldwide.
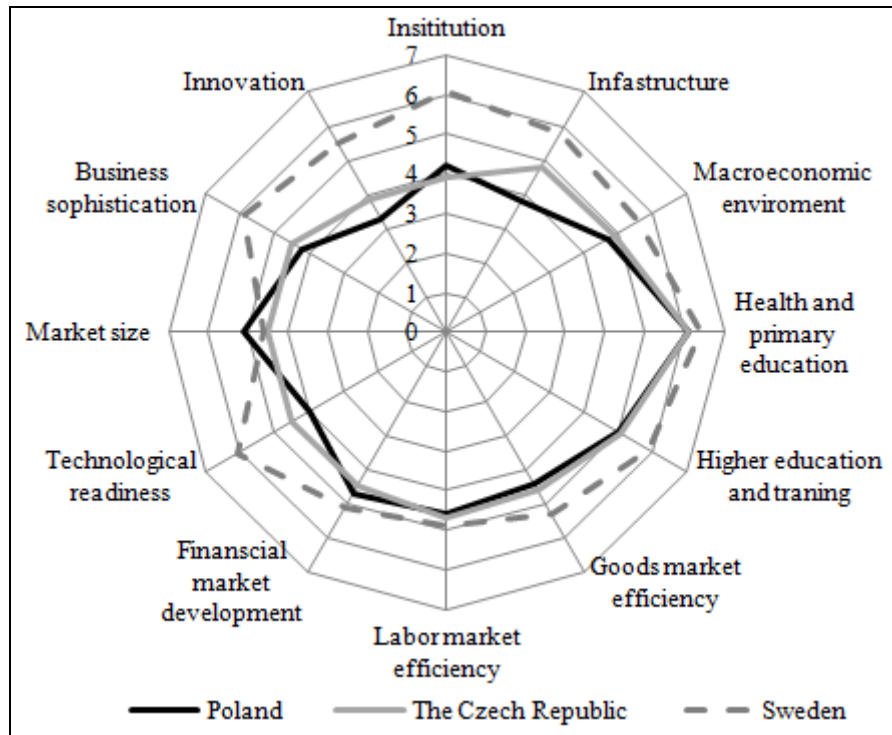
Chart 2: Relative performance of Poland with other countries (based on The Global Competitiveness Report 2010–2011, 2010)

2   HOW WE SUPPORT CLUSTERS IN POLAND?

In Poland there are neither separate policies based on specific clusters nor overall cluster policies in effect. Clusters are part of regional innovation policies and economic policy. Projects involving clusters appeared sporadically between the years 1994–1999. However, in during the 2000–2006 period, projects supporting cluster initiatives were as follows: Action 2.6 Integrated Regional Operational Programme, Measure 2.3. Sectoral Operational Programme Human Resources Development, Measure 1.3. and 1.4 Sectoral Operational Programme Improvement of the Competitiveness of Enterprises. These activities accounted for only 5.4% of Community measures identified in the Community Support. It is during this period when projects, typically financed to the development of human resources for the modern economy and innovative enterprises. Organizations related to the promotion of cluster development in Poland are now: the Ministry of Economy, Ministry of Regional Development and Ministry of Science and Higher Education and the Polish Agency for Enterprise Development. The interest in support of cluster structures and their development increased in for years 2007–2013. The need to support the cluster was included in the nationwide operational programs and regional operational programs of individual Polish voivodships. The document "Strategy for increasing the innovativeness of the Polish economy in 2007–2013", emphasizes the importance of a cluster in a supportive role for enterprises to

improve upon their innovation. In the National Regional Development Strategy for 2007–2013 emphasis is placed on promoting cooperative ties among enterprises, popularizing the knowledge of the clustering, deepening of cooperation among public and private sectors and business environment (Poland National Strategic Reference Framework (NSRF) for 2007–2013, 2006, p. 37). It should be noted that those documents contain only general information on cluster, their problems and possible solution. The Poland NSRF for purposes directly related to support clusters allocated approximately 116 million euro (104.3 million in the Operational Programme Innovative Economy, and 11.8 million Operational Programme Development of Eastern Poland).

For the years 2007–2013 the following sources of financing for emerging cluster initiatives and development of existing clusters are available in Poland (www.biznesklaster.pl):
- Operational Programme Innovative Economy, Measure 5.1 "Supporting cooperative relations on a supra-regional importance." It supports initiatives that lead to cooperation and strengthening the links between economic and scientific organizations representing at least two regions.
- Operational Programme Human Capital, , Measure 2.1 "Development of modern economy" (Sub-measure 2.1.1 "Development of human capital in enterprises", Sub-measure 2.1.2 "Partnership for increasing adaptability", Measure 2.1.3, "System support for increased adaptability of workers and enterprises
- Operational Programme Development of Eastern Poland (this program is dedicated for five regions: Lubelskie, Podlaskie, Podkarpackie, Świętokrzyskie, Warmińsko-mazurskie), Measure 1.4 "Promotion and Cooperation", component "Cooperation" - co-financing projects related to building networks, including those related to the identification and development of clusters;
- Regional Operational Programmes
- Seventh Framework Programme, which is the EU's financial instrument supporting research and development, encompassing almost all scientific disciplines.

Different approaches to support clusters are being applied at the Polish regional level. Some Polish regions (Świętokrzyskie, Mazowieckie, Wielkopolskie, Warmińsko-mazurskie) directly point to the possibility of supporting formal clusters of structured funds (within the Regional Operational Programmes), and extracts for this purpose a separate action. Other regions (Podkarpackie, Podlaskie, Lubelskie, Małopolskie, Łódzkie, Dolnośląskie, Śląskie, Opolskie, Lubuskie, Kujawsko-pomorskie, Pomorskie) connect clusters of activities that support other efforts to promote entrepreneurship, business environment and build relationships between businesses sharing the sphere research and development. In the case of one region does not explicitly mentioned the possibility of supporting cluster initiatives and cluster. Pomorskie region alone has developed and implemented the "Regional Cluster Support Program for 2009–2015". This program aims to support three types of clusters (key, sub-regional/local and embryonic/network technology). Two other polish regions (Dolnośląskie, Wielkopolskie) - launched a official program to support clusters based on relatively small internal resources. We see that only some regions leaders are aware of the benefits of the development of cluster structures, and therefore offer them support. Some regions have participated or currently participate as partners in international projects Regionet, CluStart "Boosting innovation through new cluster concepts in support of emerging issues and Cross-Sectoral themes". Projects are aimed at increasing the knowledge and expertise in support of clusters, both among local governments, and regional institutions for regional development. Those projects also served to develop international cooperation among

clusters of the region (Directions and assumptions of Polish cluster policy until 2020..., 2012, pp. 26–27).

Despite the various cluster support programs there is a need to form a national policy of cluster development, taking into account regional differences during the process of their formation. Equally important activities were carried out to promote the idea of clustering within each region. A impediment to the development of clusters in Poland are the regulations that should facilitate cooperation between public and private sectors. Financial aid from EU funds is just one of many elements to support a cluster. Mutual trust between companies and a desire to start a business cooperation are also essential factor. The Public Opinion Research Centre shows the level of public confidence in Poland to be low. Their research from March 2010 shows that 96% of Poles trust family, friends (90%), relatives (87%), colleagues (84%), and - to a lesser extent - neighbors (74%), and the parish pastor (69%). 46% of respondents did not trust strangers (The Public Opinion Research, 2010). Low public confidence affects the quality of cooperation between enterprises within clusters.

3   FORMATION AND FUNCTIONING CLUSTERS IN POLAND

Operation of enterprises in the clusters is a new form of spatial organization of production processes in Poland. In the 90's the first study of regional innovation systems, which concerned industry associations with science was carried out. In 2002, the Institute for Market Economics in Poland was the first to conduct a study identifying the presence of clusters in the economy. Similarly, by 2007 the Polish Agency for Enterprise Development had identified a cluster structure. Studies of clusters in Poland have been conducted for a relatively a short time. So there has been no comprehensive study of clusters, apart from a few fragmented studies of clusters in Poland. Some information on the number of identified clusters in Poland can be found in the *European Cluster Observatory* (www.clusterobservatory.eu). According The Observatory there are 246 clusters in Poland. More detailed information about clusters in Poland is provided by a report „Cluster benchmarking in Poland", which was prepared by Polish Agency for Enterprise Development (PAED) in 2010. The authors showed that between the years 1997 and 2009 in Poland there were 178 cluster initiatives. However 47 of them were selected to take part in this research, because only those have been classified as a cluster and it was possible to establish contact with them (Cluster benchmarking in Poland, 2010). A high concentration of specialized business in an area or related industries does not necessarily imply that there is cooperation between enterprises, which is the basis of the cluster. I can vouch that the report of PAED illustrates in a good way the reality of creating and functioning of the Polish clusters.

The best known example of a high technology cluster in Poland is The Aviation Valley Association. It was created in 2003, as a non-profit organization, to provide a means of rapid development and growth of the aerospace industry in southeastern Poland. This historic decision was made by a group of leading aeronautic producers, suppliers and businessmen. Significant funding for the Association has been provided by Pratt & Whitney, a world leader in the design, manufacture and service of aircraft engines, space propulsion systems and industrial gas turbines. Now it represents 90 companies within the region, with several others in the process of applying for membership (www.dolinalotnicza.pl). Other known clusters in Poland are: The Tarnow Industrial Cluster Plastic Valley, Ceramic Tiles in Opoczno, Amber in the Gdansk, Automotive Parts Manufacturers' Association and Organic Food Valley.

In Poland 47% of the studied clusters were established in 2007, which is related to the availability of European programs aimed at promoting clusters, described earlier. 36 % of clusters were established as a result of undertaken activities (Cluster benchmarking…, 2010, p. 31).

The main creators of the clusters were entrepreneurs themselves who saw the benefits of cooperation. Clusters were also formed through the initiatives of businesses supporting institutions as well as research and development sectors. These clusters have 1886 members. 78% of members of clusters is business, 8% of business supporting institutions (for example: industry associations, chambers of commerce, Centre for Innovation and Transfer of Technology, non-profit consulting institutions and agencies for ownership transformations or restructuring agencies), 8% of research and development sectors, 6% of other members (which include local government units).
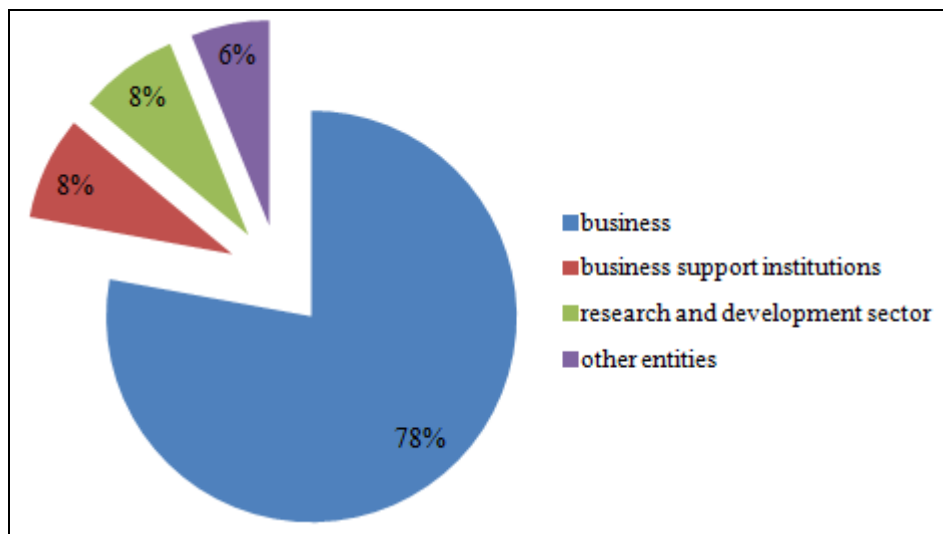
Chart 3: Members of clusters (Cluster benchmarking in Poland: survey report in 2010, 2010, p. 31)

Chart 4 presents the size of enterprise which are part of the clusters surveyed. 44% of clusters in Poland consist of microenterprises, which employ up to 9 people. Clusters in Poland are a good way of developing small and medium enterprises. One cluster in this group consists of microenterprises; others clusters consist of different-sized enterprises.
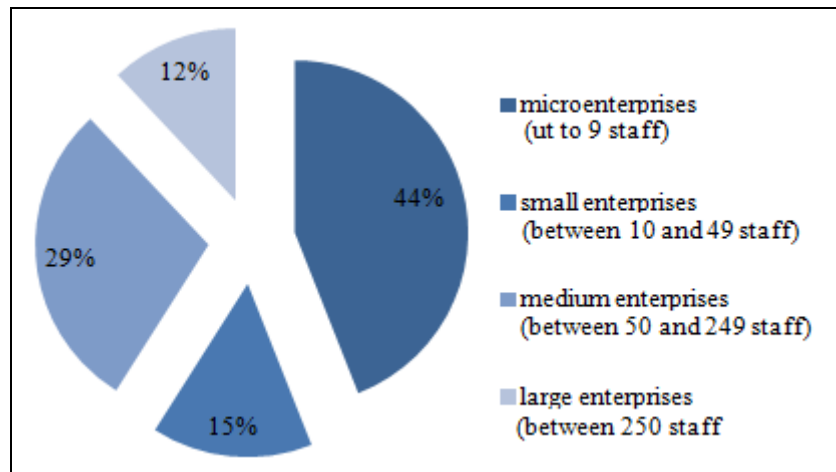
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Chart 4: Structure of business in clusters (Cluster benchmarking in Poland: survey report in 2010, 2010, p. 31)

43% of cluster initiatives participating in the benchmarking operates on an association and 11% of signed consortium agreements. Other clusters operate in the form of: joint-stock companies, companies with limited liability, foundations, agreements, associations partnership agreements, contracts of cooperation and economic chambers.

32% of clusters function in highly innovative industries such as computer science and aviation. 40% of the clusters represent intermediate level of development industries (hospitality and tourism). Clusters in Poland have limited financial resources to carry out their tasks. Two years prior to the research, 43% of respondents did not have any outside financial resources. 28% of clusters had a budget of under 500 thousand PLN. 24% of clusters have more than one million PLN for development of the cluster. Clusters have problems with financing their projects from their own resources alone. The studied clusters initially gained from EU 65,5 million PLN worth of funds and they carried out 62 projects. These projects focused on financing infrastructure, including construction and manufacturing lines. 63% of clusters allocated less than 10% of their budget on research and development. 28% didn't conduct any on research and development at all. Two clusters spent an average of 80% of their budget on research which did not result in the form of patent protection. One cluster, despite having 20% of the budget appropriated, developed five innovative solutions, and received a patent for them (Cluster benchmarking..., 2010, p. 46).

Members of the cluster share with each other some forms of cooperation (see chart 3). Almost all clusters (47 clusters) have their own website, where we can find contact details and information about the members of the cluster. One cluster has no website, because it has no money for its upkeep. 98% of clusters conduct joint activities in the field of advertising. 10% of clusters are not organized nor participate in any fairs or exhibition. 58% of clusters organized social events for members once or several times a year. Such events enable their members to seek opportunities cooperation to in an informal way. 56% of clusters see the need to cope for cooperation with public authorities in order to consolidate their position in the market (Cluster benchmarking..., 2010, pp. 82–89). Cluster activities are mainly aimed at local government where the clusters operate.

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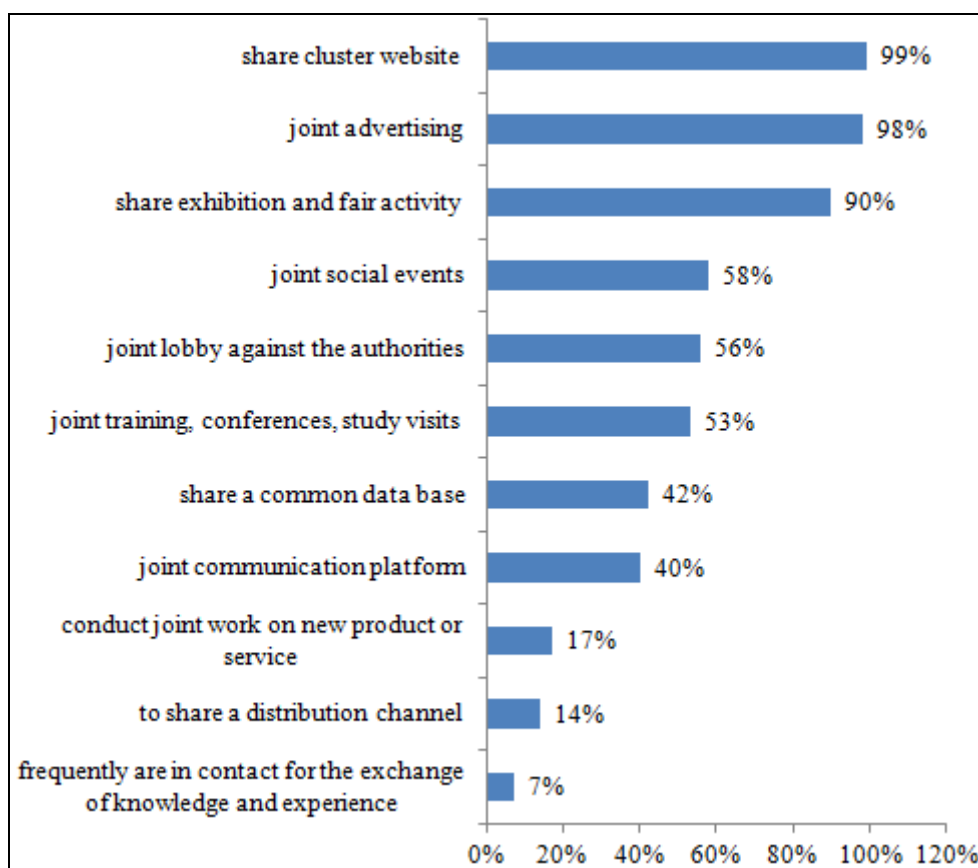
Chart 5: Types of activities undertaken by the studied clusters
(http://www.pi.gov.pl/eng/chapter_86525.asp)

53% of the cluster conducts one single form of education for members of its cluster. They create activities such as workshops, visits to foreign clusters and conferences. Clusters are interested in raising the level of expertise among their members. The analysis shows that the clusters that have received external funds applied several measures to increase the level of knowledge.

42% of clusters share a database, which usually contains contact details of their members and partners. 11% of clusters recognized that such a database is important. 40% of clusters have communication frameworks, where they have discussion forums and groups. Only 17% of clusters share work on new products and services. 35% of clusters are considering such a cooperation. 14% of clusters share distribution channels. Flow of information and diffusion of innovation is limited. It is notable that the transfer of knowledge and innovation make operating business in clusters highly innovative.

The total employment in companies of all clusters in Poland is around 284 000 people (Cluster benchmarking ..., 2010, p. 124) which accounts for 1.6% of employees in the economy. By comparison, the proportion of employees in clusters distinguished by the ECO is about 15.5%, whereas the average for the European Union (EU-27) is 20.7% (Directions and assumptions of Polish cluster policy until 2020, 2012, p. 18). It can be concluded that cluster have a limited influence on the labor market in Poland.

The clusters comprise of approximately 42 entities, which on the average employ about 5,800 employees. In clusters involved in highly innovative research contracts with the industry, an average of 20 employees are involved. Clusters tend to employ highly qualified professionals (averaging 50% of employees) (Cluster benchmarking..., 2010, pp. 56–57).

4   CONCLUSION

In Poland there no specialized tools for developing a policies based on clusters. It is therefore necessary to develop suitable policies to support a cluster model which takes into account the evolvering conditions. A cluster is a difficult tool to stimulate growth, as it requires the formation of human capital at a high level. Local governments should in the right way support the development of human capital and seek to incur level of trust in society which will improve the cooperation between enterprises.

It is also important to create the proper conditions for clusters, whence not enough aid is distributed to entrepreneurs interested in this form of business organization, if there is adequate infrastructure and legal basis. In addition, cooperation between research centers and the private sector should be strengthened because a competitive and innovative economy is the "cooperating" economy.

Clusters in Poland are a relatively recent phenomenon compared to the traditions of European clusters and Silicon Valley. Clusters which have participated in the study are in the early stages of development. At this stage, clusters need promotion, financial and legal support and business consulting. Clusters have some difficulties with financing the activities using solely their internally funds. Projects and activities are used by clusters which have received external funding.

Members are unwillingly to cooperate with each other. They do not exchange the information about their technology for fear of competitive advantage - this is a result of low levels of trust in Poland. Low level of cooperation between members of clusters as well as low of funding for research and development are the cause of lead to a low level of innovation and technology exchange among clusters.

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Enterprise in Turbulent Environment

POWER GENERATION COMPANIES' PERFORMANCE IN LIBERALIZED ELECTRICITY MARKET: CROSS-COUNTRY ANALYSIS

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ABSTRACT

After recent restructuring process of Russian power sector responsibility for financing investment in power generation was shifted away from generally state-owned monopolies to private investors. Investors faced with plenty risks in the liberalized market and to find out whether they should risk their money investors analyze the company's performance. So for making effective investment it's necessary to define what factors (economic, social, regional and industry factors or company's financial indicators) influence on companies' performance. Russian electricity market is on the early stage of liberalization so it's interesting to regard what factors influence on companies' performance on the relatively liberalized electricity market and to find some "lessons" for Russian one. Comparison with foreign experience allows to find out whether significant factors of companies' performance depends on the stage of market liberalization. In research we consider US electricity market as it's liberalized and the restructuring process of power sector in both countries passed on relatively same scenario. For defining key factors of companies' performance in Russia and USA panel data analysis was used. As an indicator of company's performance Tobin's q was chosen, eight American power companies and twenty Russian generation companies were regarded. Economic, social, regional factors with financial indicators were included in research. All data were calculated for period since 2006 to 2010. As a result we found that regional factor (such as GRP growth rate) and financial indicators (such as return on return on equity, liquidity ratio and others) are significant both for Russian and US power companies' performance. For US ones renewable energy projects and dividend per share also play an important role for company's performance. Also we find that the significant factors of generation companies' performance doesn't depend on level of market liberalization.

Keywords: Company's performance, Panel data analysis

1 INTRODUCTION

This paper explores the relation between Russian generation companies' performance and economic, social, regional factors and financial indicators. Tobin's q, as the ratio of the firm's market value to the book value of its assets was chosen as an indicator of companies' performance (Tobin, 1969, pp. 15–19). After restructuring process of Russian electricity market responsibility for financing investment in power generation was shifted away from generally state-owned monopolies to private investors. New owners of Russian generation companies have to find financial resources and to invest them for building new capacities for providing sustainable future development of their company and the sector in the whole. So new owners has to attract external financial resources or use company's equity for financing investment projects. Today it's quite important to accumulate enough financial funds (both external and internal ones) for realizing generation companies' investment programs (Gitelman et al., 2011, pp. 34–40).

For evaluating risks of investing company's performance is supposed to take into consideration. Company's managers also take into account company's performance during investment decision making process (Brown et al., 2006, pp. 45–56). So from one hand company's performance could be regarded as a signal for investors about the profitability of investment process and from another hand represents the ability of Russian generation companies to provide sustainable development in the future due to investment program's realization. If company doesn't want to face with the lack of financial resource it's important to maintain high level of its performance. For managing company's performance it's necessary to define what factors and what ones don't influence on it. It will help to work out a system of company management for increasing generation companies' performance.

Russian electricity market is on the early stage of liberalization so it's interesting to regard what factors influence on companies' performance on the relatively liberalized electricity market and to find some "lessons" for Russian one. Comparison with foreign experience allows to find out whether significant factors of companies' performance depends on the stage of market liberalization. USA was chosen for three main reasons. First of all the restructuring process in Russian electricity sector was made on relatively the same with US electricity market scenario. Secondary USA like Russia has federal structure its electricity markets includes different states like different regions in Russia. And the last but not the least in USA there is highly competitive electricity market with effective and transparent rules.

Finally we find that Russian generation companies' performance doesn't depend on industry indicators (such as electricity generation in the region, electricity consumption and tariffs growth rate in the region). It predominantly depends on financial indicators of Russian generation companies, such as assets return ratio, quick liquidity ratio. Comparison Russian and US generation companies demonstrates that there are similarities in significant factors of companies' performance for both countries. It testifies that significant factors of companies' performance doesn't depend on the stage of market liberalization.

Since the restructuring process began interest to research of Russian electricity sector became to grow. Some researchers analyze main aspects of new company's management (Gitelman et al., 2002, 2006) others try to analyze and evaluate the investment opportunities of new electricity companies (Esipenko, 2012; Mikhailov, 2004). Among foreign researchers it's needles to mention Pitman R. with his attempt to explore the structure of new wholesale generation companies on the early stage of their forming (Pitman, 2006). However the aspect of determining key factors of company's performance for making some management recommendations isn't researched enough.

This article contains some results of Russian and US energy companies' research making for last 7 years.

2   RESTRUCTURING OF RUSSIAN ELECTRICITY SECTOR

2.1   General scheme of restructuring process
In the beginning of XXI century it became obviously that for stable future development of the Russian electricity sector it's necessary to find a plenty amount of financial resources for building new capacities to meet growing demand. For this goal the structure of sector was drastically changed.

Reorganization was aimed at increasing efficiency of power plants operating, creating conditions for Electric Power Industry development on the basis of stimulation of investment activity and finally providing consumers with sustainable and regular power supply.

Sector's structure was changed: natural monopoly functions (such as dispatching and power transmission) and potentially competitive ones (production and supply, service and repair works) were separated. So in power sector new structures responsible for separate activity types were created instead of former vertically integrated companies which exercised all the above mentioned functions (Gitelman et al., 2002, pp. 51–57).

Generation, sales and repair companies became private, and all natural monopoly spheres remained under government control. So the conditions for competitive electric power market are supposed to be created. It means that market prices became unregulated by the State and are formed on demand and supply basis. Under these conditions new players compete trying to reduce their costs.

As concerns generation companies they were divided into two main groups: wholesale generation companies (WGC) and territorial generation companies (TGCs). Each WGC comprised power plants, situated in different regions of the Russian Federation, to prevent possible monopoly power. So WGCs became the largest wholesale market competitors. Territorial generation companies (TGCs) contain power plants not within WGCs and located in several neighbouring regions.
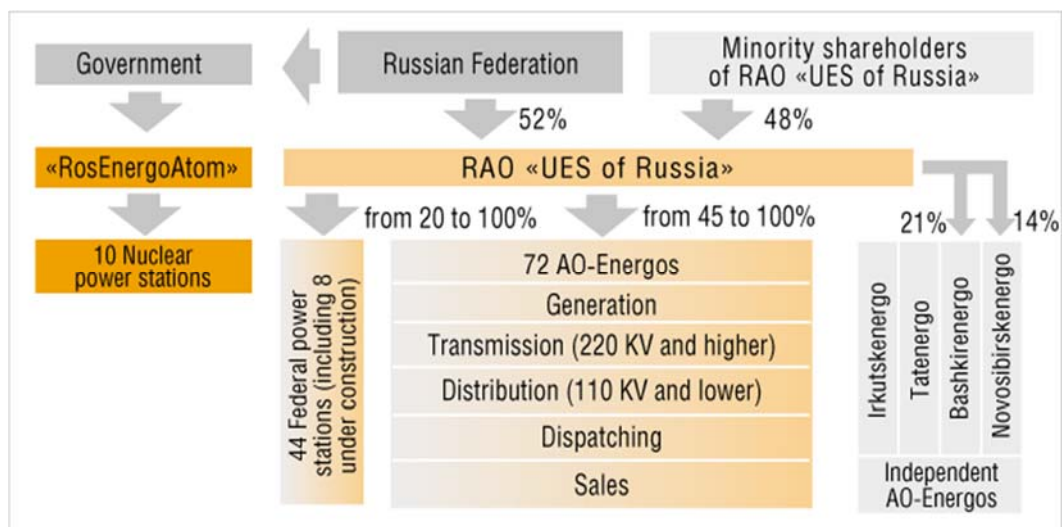
Figure 1: Power Sector Structure in 2000 (http://www.rao-ees.ru/en/reforming)

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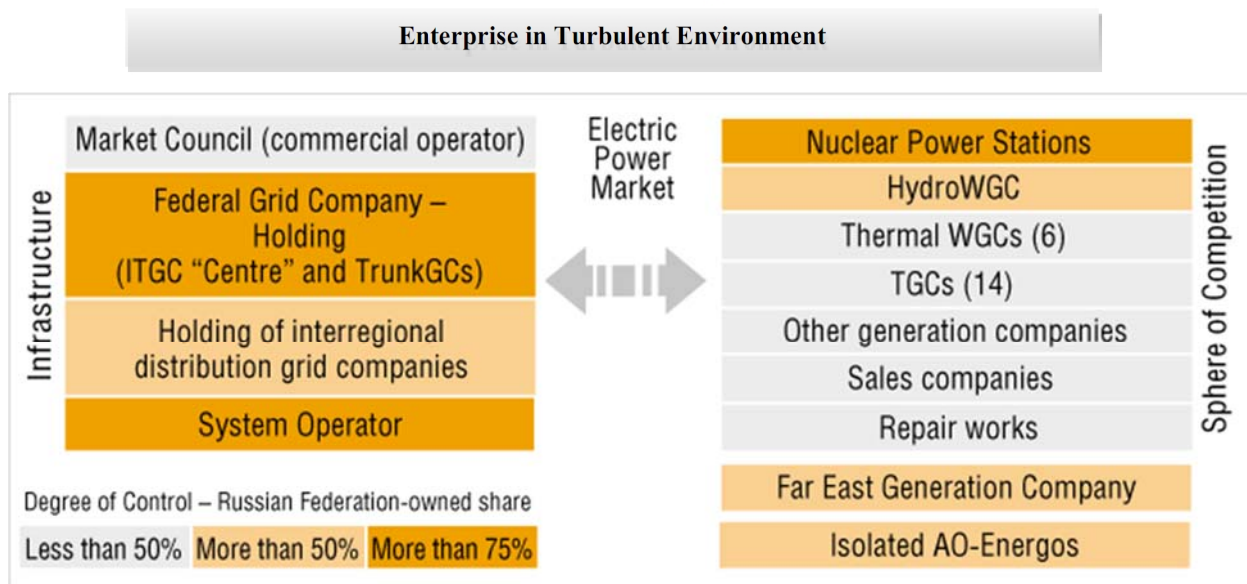
Figure 2: Power sector structure today (http://www.rao-ees.ru/en/reforming)

2.2 Investments into Russian generation sector

Since the beginning of restructuring process almost all generation companies have strategic investors nowadays. Such foreign energy holdings as E.ON, Enel, Fortum bought shares of Russian generation companies. Despite on it Russian electricity sector till 2030 need 9,8 trillion rubles for realizing all investment projects (Gitelman et al., 2009, pp. 34–41). These financial resources are planned to be taken both from company's equity (new owners' money) and external funds. The last one will play the smaller role that the first one as the change of main strategic investors in the field isn't expected to be in the nearest future. Nevertheless both for investors and for company's owners it's important to be sure in successful investing in company's assets. For this purpose they take into consideration the generation companies' performance.

Companies' performance testifies the ability of company to invest in its assets effectively. From one hand it reflects the ability of company to accumulate financial resources (as external and internal ones) and to invest them effectively (to choose project correctly and to make a plan of its realization). On the modern stage Russian electricity market development the problem is not to attract funds in the industry for sustainable future development but to define the effectiveness companies' investment made with both external and internal financial resources. In other words, it is important to understand whether Russian generation companies able to make planned investment plans just in time, how effectively they are able to finance their current production and future investment?

3 METODOLOGY OF ANALYSIS

3.1 Factors of companies' performance

For taking effective measures for managing generation companies' performance first it's necessary to answer the question what factors influence on it and what once don't. Moreover a lot of factors may influence on the performance of the company (and on generation company as well), such as social and economic ones, regional and industry indicators, financial factors. Consequently approximately 20 factors were included into analysis trying to define what ones influence on company's performance and what ones don't (Table 1).

Effectiveness of investment depends on financial indicators of the company. So it's necessary to take into account different aspects of company's financial performance, such as ability of company to pay its debts, the amount of external financial resources, assets' management effectiveness. If company doesn't have enough funds or couldn't manage it effectively it will probably invest successfully in its assets.

For generation companies it's also important to take into account regional factors as their success could depend on region where companies' capacities are located or where they supply product. And for sure the effectiveness of investment depends on economic and social situation in the regions and in the whole country as well. That's why a complex of factors was regarded in analysis of company's performance.

All these factors were hand calculated for Russian and for US generation companies. Exceptions were made for dividend per share, P/E ratio and share of capacities using renewable energy. First and the second ones weren't calculated as during period of analysis Russian generation companies issued shares and consequently regarding these indicators is useless. In Russia there is less than 0,2% of renewable energy generation so including share of capacities using renewable energy in regression is supposed to be also useless.

Table 1: Factors that may influence on generation companies' performance

№	Group of factors	Factors
1.	Factors of company's financial performance	**-ratios of turnover** (equity turnover, assets turnover) **-ratios of capital structure** (leverage, Equty to Debt ratio); **- liquidity ratios** (current ratio, quick and absolute ratios); **-profitability ratios** (return on assets, return on equity, return on tangible assets); - **dividend per share;** - **P/E ratio.**
2	Economic and social factors	-growth rate of gross regional product (GRP); -rate of unemployment; -price index.
3.	Electricity sector's factors	-electricity production; -electricity consumption; -tariff rate; -share of gas generation; -share of renewable energy's generation.

In USA we analyze eight main players: AEP, ConEdison, PGE, Duke, Georgia, Northeast Utilities, SCE, Southern Company. They provide with electricity more than 9 million people and all together have more than 60% of the whole market in USA (BMI report, 2009, pp.23-24). In Russia we analyze all generation companies (except RusHydro that include hydro generation and remains under government control). So we include 14 TGCs and 6 WGCs for analysis of Russian electricity market.

3.2   Indicator of energy company's performance

For defining key factors we use the Panel data analysis made with STATA8. To implement panel data analysis it's necessary to define the dependent variable.

To define the indicator of energy companies' performance first it's important to understand what we understand under this definition. As it was already mentioned companies' performance demonstrates the ability of company to accumulate financial resources (as external and internal ones) and to invest them effectively in successful projects. Investment to energy company's assets is object of analysis so it's necessary to evaluate how effectively company "creates" its assets. Finally we chose Tobin's q as an indicator of companies' investments in assets and as an indicator of companies' performance.

After Tobin first introduced the concept of "q" defined as the ratio of the market and replacement value of the firm's assets (Tobin, 1969, pp. 15–19) it's became widely used, as firm's investment opportunities set (Lang et al., 1995, pp. 137–154), the extent of agency problems (Opler et al., 1993, pp. 51–59), and the overall quality of the firm's management team (Lang et al., 1989, pp. 181–192). Tobin's q also is often regarded as statistic that might serve as a proxy for the firm's value from an investor's perspective (Badrinath, 1994, pp. 109–131).

Tobin's q is typically estimated using one of two competing approaches (Wolfe, 2003, pp. 155–159). The first uses an extensive set of financial statement information as a starting point for estimating both market and replacement values. These data are then adjusted for factors that are likely to cause systematic divergences between market and accounting value (Perfect et al., 1994, pp. 313–341).

In contrast, the second approach (henceforth to as the simple approach) uses a comparatively small set of financial statement data with minimal adjustment (Chung et al., 1994, pp. 70–74). In this research "simple" one was used and Tobin's q was calculated as follows (Chung et al., 1994, pp.70–74):

$$q_{cp} = \frac{mve + ps + ltd + cl - ca}{ta} \tag{1}$$

MVE – value of companies' common stocks;
PS – liquidation value of preferred stocks;
LTDEBT – book value of companies' long-term debt;
CL – book value of company's current liabilities;
CA – book value of company's current assets;
TA – book value of total assets.

All indicators and Tobin's q were calculated annually since 2006 to 2010 for energy companies in USA, and quarterly since the third quarter of 2006 till the third quarter of 2011. We include dummy variables in regression and find that different analysis periods don't influence on company's performance.

4   RESULTS

4.1   Factors of Russian and US energy companies' performance
Based on statistical tests made with STATA8 the model with fixed individual effects for Russian generation companies was chosen. As a result for Russian generation companies we determine four significant factors of company's performance (table 2).

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Table 2: Significant factors of company's performance

Significant factors	Statistics
Debt to Equity ratio	-2,56 z-Value = - 3,415
Quick liquidity ratio	0,18 z-Value = 2,635
Return of equity	0,707 z-Value = 3,98
GDP growth rate	4,50 z-Value = 2,98

So as we could conclude from Table 2 that for maintaining company's performance it's necessary to control company's debt and its ability to service its debt in the short-time period. We also find that increase in growth rate of gross regional product increases Tobin's q and consequently increases the company's performance of generation companies.

The increase of return on equity on 1% increases Russian generation companies' performance on 0,7%. Return on equity ratio demonstrates how money a business makes for its investors who therefore pay considerable attention to it. So if company uses and manages its assets effectively it will increase the performance of Russian generation companies.

Companies' equity plays an important role in Russian generation companies' performance. Both Debt to Equity and Return on Equity ratios are significant. In our opinion it could be explained as it identifies the ordinary shareholder's investment in a company. Industrial factors such as electricity production and generation, tariffs rate aren't significant for energy company's performance in Russia.

The most significant factors is GDP growth rate. It complicates the management process as company couldn't influence on it and should only try to forecast it and to take it into consideration. Company could control and manage other significant factors that allow to manage its performance.

4.2   Factors of company's performance for generation companies in USA
The same analysis with same repressors (Table 1) and Tobin's q (equation 1) was made for energy companies in USA to define significant factors of their performance and to compare results with Russian ones that allows to conclude whether key factors of companies performance depends on the level of electricity market liberalization.

Finally we find that five factors influences on American generation companies' performance.

Table 3: Significant factors of US energy companies' performance

Significant factors	Statistics
Quick liquidity ratio	0,102 z-Value = 3,45
Return of equity	0,174 z-Value = 2,76
Dividend per share	0,009 z-Value = 4,98
Growth rate of GRP	0,151 z-Value= 5,69
Capacity on using renewable energy	0,098 z-Value = 2,63

Like for Russian generation companies quick liquidity ratio, return on equity and growth rate of gross regional product demonstrate their significance for US energy companies' performance. Like for Russian companies the most significant factor for US energy companies' performance is growth rate of gross regional product. When gross regional product increases it means that the demand on electricity is growing. Consequently energy companies who sell electricity in this region are supposed to be financially successful and are able to accumulate more money for investment in the future.

Significance of quick liquidity rate, like for Russian companies, means that for making effective investment it's necessary not to have problems with paying existing debts in short-time period. If return on assets increases it means that company manage its equity better and consequently testifies that company will be able also to invest more effectively.

The significance of capacity on renewable energy could be explained with growing importance of using renewable energy instead of coal and gas. Almost all US companies that were included in analysis have special centers for making researches and implementing results in this sphere. Moreover in USA there are a lot of special incentives for energy companies that deal with such projects.

Dividend per share wasn't calculated for Russian companies as during period of analysis they issue shares so "per share" statistics are supposed to be useless. For US energy companies dividend per share is significant and it could be explained as dividends are paid after all taxes and revenue deductions. So the higher dividend per share is the more profitable company is supposed to be and consequently the higher is her possibility to invest effectively in its assets.

If we compare Table 2 and Table 3 we could observe that there are three similar significant factors: quick liquidity ratio, return on equity and growth rate of gross regional product. It means that there are some similarities in factors of companies' performance on electricity market both in USA and in Russia despite on different level of electricity market liberalization.

5   CONCLUSION
We determine what factors influence on generation companies' performance in Russia. Based on panel data analysis made with STATA8 we find that to increase companies' performance it's necessary to take into consideration financial indicators and growth rate of gross regional

product. The growth rate of gross regional product is the most significant factor of company's performance. Industrial factors don't influence on energy companies' performance in Russia.

If company wants to increase its performance it's necessary to take into account its debt how it could pay for it and how effectively it uses its assets and equity. In our opinion such conclusions could be explained with the sector's features. Electricity power sector is a capital intensive and under conditions of electricity market and non-transparent of its main mechanisms' operation, attracting debts could decline the companies' performance. Summarizing all of these facts we could conclude that Russian generation companies could control and manage its company's performance via influencing (on financial indicators) or predicting (gross regional product growth rate) significant factors. It's important as it allows from one hand to attract necessary amount of financial resources, accumulate funds and from another hand to invent in company's assets effectively.

Analyzing US energy companies we found that growth rate of GRP, dividend per share, capacity on renewable energy, quick liquidity ratio, return on equity influence on energy company's performance. The most significant factor as for Russian generation companies is GRP's growth rate. Cross-country analysis allows not only to determine significant factors of energy companies' performance in the U.S. but also to compare the results with ones for Russian generation companies.

We find three similar significant factors of company's performance as for Russian and U.S. energy companies: growth rate of GRP, quick liquidity ratio and return on equity. It means that the list of significant factors of company's performance doesn't depend on the level of liberalization of electricity market. The similarity of significant factors in Russia and USA may also testify that in Russia relatively competitive electricity market was created.

Nevertheless there are some aspects that should be taken into consideration with Russian generation companies. There are some aspects in experience of US energy companies that could be useful for Russian companies in the future as US electricity market is highly competitive today and the sector's restructuring process passed on the relatively the same scenario. First of all it's necessary to pay attention to renewable energy projects. There is a growing interest to this sphere because of growing concerns about environment and unpredictable gas and oil prices. And the last but not the least it's important to control and manage dividend per share ratio in future.

The significance of debt to equity for Russian companies and non-significance for US ones testifies that on Russian electricity market risk plays more important role than on US one.

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CULTURAL DIMENSIONS AND MOTIVATIONAL TECHNIQUES AS BASIC PREREQUISITES FOR HUMAN CAPITAL MANAGEMENT

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ABSTRACT

The main purpose of the paper is to present a conceptual link between cultural dimensions and the role of motivation and motivational techniques within a corporate environment. The main focus of this study is the human capital of an organization as a set of specific features and characteristics. In the context of the thesis, there is inserted as appropriate tool the study and the identification of the meaning of human capital and its manifestation within the business unit as well as to present concepts about the relationship with cultural organizational dimensions and motivational techniques as a function of different views on motivation. Motivational techniques in a society without an adequate level of business maturity are rather a practical extrapolation of theoretical postulates, without a great opportunity for their optimization. The introduction of a new approach to identification and handling of human capital requires consideration of knowledge as an economic resource and develop a clear concept of strategic management of knowledge, which is demonstrated by the mobilization of intellectual resources of the organization, of abilities and attitudes for a good diagnosis of the business unit. Optimizing knowledge and skills through education and training outside the company or through experience gained in it is essential to optimize and increase human capital in business structure. So, should we consider human capital and the knowledge as economic resources? Regarding the nature of the relationship between organizational culture within its matrix and motivation like a process, several incentive techniques could be obtained, through specific analysis of motivational activity of the company and by assessing the business – maturity. Then, should we be able to answer the question whether rational motivational techniques might affect the cultural dimensions of the organizational culture in business unit, given that corporate culture is an indisputable factor for construction and image identification of any economic structure.

Keywords: Business maturity, Cultural dimensions, Human capital, Knowledge, Motivation

1   INTRODUCTION

Should we be able to present a conceptual link between cultural dimensions and the role of motivation and motivational techniques within a corporate environment – that is the main purpose of the paper.

In the context of the thesis, there is inserted as appropriate tool the study and the identification of the meaning of human capital and its manifestation within the business unit as well as to present concepts about the relationship with cultural organizational dimensions and motivational techniques as a function of different views on motivation. Motivational techniques in a society without an adequate level of business maturity are rather a practical extrapolation of theoretical postulates, without a great opportunity for their optimization.

The introduction of a new approach to identification and handling of human capital requires consideration of knowledge as an economic resource and develop a clear concept of strategic management of knowledge, which is demonstrated by the mobilization of intellectual

resources of the organization, of abilities and attitudes for a good diagnosis of the business unit. Optimizing knowledge and skills through education and training outside the company or through experience gained in it, is essential to optimize and increase human capital in business structure. So, should we consider human capital and the knowledge as economic resources.

Regarding the nature of the relationship between organizational culture within its matrix and motivation like a process, several incentive techniques could be obtained, through specific analysis of motivational activity of the company and by assessing the business – maturity. Then, we should be able to answer the question whether rational motivational techniques might affect the cultural dimensions of the organizational culture in business unit, given that corporate culture is an indisputable factor for construction and image identification of any economic structure.

2   HUMAN CAPITAL WITHIN THE BUSINESS STRUCTURE

The main focus of this study is the human capital of an organization perceived as a set of specific features and characteristics, embodied in its employees (knowledge, skills, abilities, health, motivation) that have a value and a source of future income for the worker, meaning the owner of the human capital as well as for the organization which, under certain conditions is using that capital (Krull, 2008).

In this sense, the main actors, interested in the development of the human capital in the business unit are either the employee (or worker in general) and the company itself.

Human capital of the company level is a significant part of the organization's intellectual capital and greatly affects the appearance of other components. The role of its management consists in striving to increase the participation of intangible factors in the proposed goods and the overall market value of the organization. Managers, acting in their best diagnosticians, should be open for using new approaches to the human capital in the company, based on the development and the operationalization of various strategies.

Ultimately, this capital has a value and is a factor of efficiency and profitability for the structure itself as well as for its employees.

Optimizing knowledge and skills through education and training outside the company or through experience gained in, it is essential to perfect and to increase human capital in the business structure.

As seems appropriate, should we develop a model that links the operational management of the processes of production and the use of knowledge, people, communication networks and technologies, the specific corporate culture with the strategy for the knowledge management. This algorithm requires precision in the formulation of strategy in terms of modes of its implementation and of course, in terms of coherence with the strategic management of the company.

The more employees are familiar with the strategy of the company and the more are involved in it, the higher are the chances that employees make the most of their efforts that ultimately lead to improved efficiency and financial performance (Hristov, 2009).

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There are different systems to monitor business processes in real time. One of successful approaches that will observe more informative, is the system of Balanced Scorecard. The initial impetus for the formation of the concept of Balanced Scorecard for effectiveness is given by studying the experience of the company Analog Devices, which under the leadership of its Vice President Arthur Schneiderman implement corporate systems of indicators (Corporate Scorecard). The maps in addition to traditional financial metrics used indicators of customer service, quality products, length of production cycle, development of new products and more. Gradually modified versions of the Balanced Scorecard began to be used in areas outside the business - social activities, education and local government activities of non governmental organizations and others. The main purpose of the Balanced Scorecard is to mobilize the organization in a new strategic direction, but as an instrument to measure - to present the characteristics of all relevant factors that determine the success of the company.

When in the early 90s, Robert Kaplan and David Norton /R. Kaplan & David Norton/develop an approach, called "The Balanced Scorecard for effectiveness", large companies are hopeful that real options are created for optimizing strategic management, as it includes and knowledge management. In a balanced system of objectives and indicators derived from the vision and strategy of the company in the process of governance, it should show exactly where the focus on specific business unit is.

According to Kaplan and Norton, vision as a focus of the future state occupy the highest field in the map. Especially important is the vision to be shared at all levels, which inevitably refers to the organizational culture, respectively its relationship with specific knowledge management. The conceptual idea leads to the development of strategy or several strategies as spelled out by individual perspectives. In general terms these perspectives are: finance, customers, internal business processes and learning and development. Directly towards these perspectives strategic objectives are set, which are in strict causality with the overall vision.

The next levels are critical success factors and key performance indicators. Indicators and complied values, desirable to be achieved, provide management capabilities for monitoring activities. At the lowest level in the structure of the Balanced Scorecard is the action plan, which is a set of strategic initiatives and concrete actions and steps by which to achieve strategic objectives.

Knowledge management aims to increase overall performance. Managers focus on partial or complete change of corporate culture, which is principally a difficult process. To comply and obey of its most important resource like the knowledge, it is necessary to introduce new organizational practices that gives to the corporate culture flexibility and adaptability.

Management of business processes includes the life cycle of a process - from design and modeling through implementation, monitoring, optimization and improvement. It is closely linked with the strategic goals of the organization in designing and implementing process architectures, establishing a system of "quantitative measurement of processes" and linking them to organizational goals. As regards the management of processes in a company great thing about *Business activity monitoring* can be used to achieve better effectiveness and efficiency of current operations and to ensure long-term success.

At first glance, the specifics of this type of approach are associated mainly with large companies. But, eliminating certain specifics of the scale, many of the techniques might prove

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relevant to any company that could potentially have vision about the knowledge as a key economic resource.

In this sense, the perception of human capital as the most valuable asset of the company is based on the belief that it will lead to economic benefits for the employer. An important point is the belief that the process of transformation of human resources in human capital will have an evolutionary character will use best practices and successful management of human resources. The creation and development of human capital is an essential concept of human capital management in the realization of the personal function of contemporary and future organizations. This is only the beginning of the process of forming a new model of personnel management, which will replace the ordinary administration. The roles of the organization and employees in establishing and developing the human capital of the organization are other (Krull, 2008). The role of the company is to make the initial human capital, and later to develop through training a certain organizational culture and motivation system, also thanks to its corresponding standard physical conditions and medical care. The role of employees in the development of human capital is also very important and with a great diversity: active participation in learning inside and outside the company, implementation of learning, striving for balance between work and family life, caring for their physical and mental condition, etc.

The introduction of a new approach to identification and handling of human capital requires consideration of knowledge as an economic resource and develop a clear concept of strategic management of knowledge, which is demonstrated by the mobilization of intellectual resources, by the organization of abilities, as well as by the good diagnosis of the attitudes of business unit.

Knowledge management as a strategy for management of companies is directly related to the cultural parameters in a specific plan can be identified as determinants of innovation culture. It is imperative to implement recent recommendations for creating a new format for generating innovative attitudes.

What, however, show the results of recent research (Milanova, 2012):
- The Bulgarian companies demonstrate low degree of development of a culture of applying new knowledge, which affects principally on supply and demand of knowledge.
- The management of the knowledge is directly related to and conditioned by the organizational culture. Strategy for knowledge management is linked to the business - strategy of the company, which in turn is a function of business maturity. Business maturity of the Bulgarian companies does not correspond sufficiently with the necessary determinants for generating innovative attitude and good organizational practices.
- Just as the organizational culture in Bulgaria is heavily dependent on national economic genotype /national cultural matrix/, innovation culture, attitudes and demand of knowledge, can hardly claim yet to be directly related to specific organizational cultures and practices.
- Innovative policies and claims to fully institutionalize the concept of knowledge economy meet a kind of "wall" in undertaking specific activities and promoting advanced practices related to the innovativeness. This can only mean that there is the perception of cultural dimensions as a fundamental capital.

- Data for the Bulgarian economy made an urgent reconsideration of the prerequisites and conditions for the development of organizational culture in the new format. Otherwise, poor picture of the parameters associated with the manifestation of knowledge would become a barrier to the expectations of good modern economy.

These findings logically lead to another aspect of the research - to what extent and under what circumstances an employee, gaining experience, thanks to the work in the company, increasing their individual human capital and value of the labor market would want, or would not want to leave the company with its own funds.

This complex issue is in fact an expression of the development of attitudes and motivation respectively motivational techniques within the company. The main problem here is how it can be argued that the relationship between organizational cultural dimensions and different motivational techniques coupled corporate strategies is reciprocal and therefore, how rational motivational techniques can affect the overall organizational culture of the economic structure.

3 MOTIVATIONAL TECHNIQUES AND CULTURAL DIMENSIONS

3.1 The case of Bulgaria

There are many theories of motivation and spelled out specific motivational techniques, most of which are complementary (Anguelov, 2000; Sotirova and Davidkov, 2005, etc.). We should not present them in a summary form, neither share what they accept or reject. Rather, should we proceed to an informal synergy to answer the problem raised.

As known, the key feature in the theory of Herzberg is the difference between satisfaction and motivation of people at work (Herzberg, 2012). The scope of employment conditions is put in place to help to overcome the frustration of the work. They created human satisfaction in a short time. Herzberg underlines them as factors - stabilizers. In the course of work, there are factors that create job satisfaction and labor. The definition of Herzberg for them is as factors - motivators. In Herzberg's theory, however, there is insufficient difference between motivation and satisfaction. According to him, satisfaction can be regarded as a synonym for motivating people at work. Essentially, it revealed two causal effect relationships:
- Things people like in life, make them work harder and better and vice versa
- Things they dislike, determine the deterioration of employment performance and logically it is imperative to be removed.

For the most part, motivation theories focus on the chain: performance - satisfaction - reward (Theory of expectations theory of the restraining effects, etc). In this context, different management mechanisms are elaborated with principally different effects.

Considerable milestones in work motivation are satisfying sense of justice and understanding of organizational role (Sotirova and Davidkov, 2005). The development of motivational strategy requires in-depth analyzes of situations and applying of a set of techniques, adequate or consistent with the performers and situations. Managers must constantly learn not only the needs of its employees, and their desires to apply adequate techniques:
- Forming achievable, realistic goals for workers in the labor process in order to raise expectations that an impact produced results.

- Using money as a reward and incentive, although they are not the only incentive that people need.
- Awards and recognition of achievements. The awards are considered positive when they are earned.
- Granting of responsibility. Responsibility is a kind of challenge because it is associated with status, with delegation of rights etc.
- Enriching and expanding capacity. Bring to professional maturation of the contractor, shall be provided different challenges and opportunities for self-expression and growth.
- The increase is a strong motivator for those who enjoy working in organizations providing such an opportunity. It involves a new job, training, new skills, high level of professionalism.
- Training. Programs for continuous training and development motivate people to broaden their knowledge and skills.
- Job security - ensuring relatively stable employment, secure salary, various insurance packages, and changes in contracts for extending them.
- Establish an effective system of feedback - development of options for evaluation in the direction of staff: qualifications, achievements - recognition of human resources - a system that promptly alerts and offers references for causes of performance deviations.
- Team Building. They attract participants, make them enthusiastic and motivate them
- Development of empathy and identification with the organization. People are motivated when they believe in the mission of the organization.
- Create opportunities to facilitate operations, automation, computerization and the intellectualization of labor management.
- Ensuring synergies and contacts (formal and informal) of human potential in the organization.
- Job satisfaction. It is achieved when the work was done well; the contractors are informed of this by setting clear and achievable objectives.

The result is an amalgam of specific theoretical assumptions, and operational programs. Observations suggest that in these cases seems particularly relevant to identify the source of these specific manifestations, which actually means and determines the integration of socio-anthropological and motivational parameters in human capital management.

As mentioned in previous papers, the status of corporate cultures in Bulgaria is generally characterized by the following specific organizational parameters (Milanova, 2004, 2008, 2012):
- There was a tendency to bureaucratic structure.
- Predominant orientation process rather than outcome orientation.
- Although there is little difference in percentages is folksy predominant type of organization to work, as individuals derive their allegiance to a greater degree of organization and tend to identify with her than with the type of work.
- The organization is perceived in a much greater extent as a closed organization.
- Control of the organization is more liberal.
- Taking into account certain relativity, more organizations are defined as organizations from practical type / paramount importance in the market /organizations rather than by type of legal / for paramount importance of rules and their implementation/.

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According to its organizational culture, the unit /organization/ can be defined as a process-oriented or results-oriented, which, as deduced dimensions specifically related to organizational culture, is the first to demonstrate a link with the values, i.e. the national cultural model (Hofstede, 2001; Milanova, 2008). In Bulgaria 60% define their organization primarily as a process-oriented. This is typical for the stressed cultures with high uncertainty avoidance as the orientation process involves avoiding risk, well-known, predictable and repetitive work situations while the orientation of the results suggests comfort in unfamiliar situations prone to challenges and risks. In this dimension must be taken into account the industry, suggesting a lower or higher dose of conservatism.

In identifying the organization as a staff-oriented or oriented to the work, the percentage is almost equal, in favor of the second option. This dimension is considered to be unrelated to the value system, but rather reflects the current situation /whether at some point the organization is pressed for work, whether for this reason it "looks" and is interested only in itself/ or in the philosophy of the founders. The Bulgarian business environment, however, this dimension is mostly a problem area of the national cultural model and this is related to the attitude: collectivism - individualism.

The type of organization is determined and compared to the feeling of belonging to its own members. These types, as mentioned, are the folksy and the professional ones. In the folksy type organization is interested in family and social background of its members, but also takes account of their competence and looks at their future. While, about the professional type the privacy is seen as sacrosanct, and the only thing that matters, is the professional competence. This dimension is also seen as somewhat linked with values. Bulgarian companies in more than 50% are directed to the first type. This finding is entirely understandable, given the relationship with collectivist dimension, but there is also an impact by anxiety and the avoidance of uncertainty too.

The issue relating to control is to be implemented in a company is associated with the structure and behavior in-house environment. Strict, formal control requires rigorous, dignified behavior, respect for the agreement or arrangement with more accurate price. When talking in this case the behavior of dignity is mainly connected with the internal causality. Fully in line with this logic, about 70% indicated that their organizations' control is liberal.

Table 1 (Author)

Cultural dimensions / Motivational techniques	Orientation towards the process	Orientation towards the work	Folksy organization	Liberal control
Money as a reward and incentive	strong	strong	strong	strong
Awards and recognition of achievement	medium	strong	strong	medium
Responsibility as a challenge	weak	medium	medium	medium
Enriching and expanding the job – professional performer maturation& job satisfaction	medium	medium	medium	medium
Promotion	medium	medium	medium	medium
Training	weak	medium	medium	medium
Job security	strong	strong	strong	strong
Effective feedback system	weak	weak	weak	weak
Teambuilding; contacts intensification in the organization	weak	medium	medium	weak
Empathy and identification with the organization	weak	weak	weak	weak

Often in academic and popular discussion questions are asked about the famous deficit and modern at the same time adequate corporate culture here. In our opinion, the problem boils down to lack of maturity of the kind (Milanova, 2008): institutional environment, coupled with the current political processes; market environment; culture of the human factor.

4 CONCLUSION

Problems that remain current to the Bulgarian companies are related to basic postulates and findings, because organizational cultures are too dependent on national economic genotype.

Motivational techniques are rather a practical extrapolation of theoretical postulates, without an opportunity for their optimization, due to inadequate level of business maturity in our society as a whole.

There are entities in which this problem is successfully overcome, and there are trends to be gradual and in other business units. In this sense, our belief is that we need to mobilize the best and adequate economic, sociological, and business - anthropological mechanisms to make dynamic transformation processes by which the image of economic structures would become modern and authoritative.

Knowledge is not imposed as a key economic resource yet and therefore innovation culture is not up to par. Ultimately, the relationship between organizational cultural dimensions and motivational techniques could not be defined as reciprocal as well as actually it is not possible that rational motivational techniques influence qualitatively corporate culture.

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PREDICTIVE INFERENCES FOR FUTURE OUTCOMES WITH APPLICATIONS TO INVENTORY MANAGEMENT PROBLEMS

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ABSTRACT
Predictive inferences (predictive distributions, prediction and tolerance limits) for future outcomes on the basis of the past and present knowledge represent a fundamental problem of statistics, arising in many contexts and producing varied solutions. In this paper,, new-sample prediction based on a previous sample (i.e., when for predicting the future outcomes in a new sample there are available the observed data only from a previous sample), within-sample prediction based on the early data from a current experiment (i.e., when for predicting the future outcomes in a sample there are available the early data only from that sample), and new-within-sample prediction based on both the early data from that sample and the data from a previous sample (i.e., when for predicting the future outcomes in a new sample there are available both the early data from that sample and the data from a previous sample) are considered. It is assumed that only the functional form of the underlying distributions is specified, but some or all of its parameters are unspecified. In such cases ancillary statistics and pivotal quantities, whose distribution does not depend on the unknown parameters, are used. In order to construct predictive inferences for future outcomes, the invariant embedding technique representing the exact pivotal-based method is proposed. Furthermore, this technique can be used for optimization of inventory management problems. An illustrative example is given.

Keywords: Future outcomes, Inventory management, Predictive inferences

1 INTRODUCTION

Prediction of future outcomes based on the past and current data is the most prevalent form of statistical inference. Predictive inferences for future outcomes are widely used in risk management, finance, insurance, economics, hydrology, material sciences, telecommunications, and many other industries. Practical problems often require the computation of predictive distributions, prediction and tolerance limits for future values of random quantities. Consider the following examples: 1) A consumer purchasing a refrigerator would like to have a lower limit for the failure time of the unit to be purchased (with less interest in distribution of the population of units purchased by other consumers); 2) Financial managers in manufacturing companies need upper prediction limits on future warranty costs. A large number of problems in inventory management, production planning and scheduling,

location, transportation, finance, and engineering design require that decisions be made in the presence of uncertainty. Most of the inventory management literature assumes that demand distributions are specified explicitly. However, in many practical situations, the true demand distributions are not known, and the only information available may be a time-series of historic demand data. When the demand distribution is unknown, one may either use a parametric approach (where it is assumed that the demand distribution belongs to a parametric family of distributions) or a non-parametric approach (where no assumption regarding the parametric form of the unknown demand distribution is made). Under the parametric approach, one may choose to estimate the unknown parameters or choose a prior distribution for the unknown parameters and apply the Bayesian approach to incorporating the demand data available. Scarf (1959) and Karlin (1960) consider a Bayesian framework for the unknown demand distribution. Specifically, assuming that the demand distribution belongs to the family of exponential distributions, the demand process is characterized by the prior distribution on the unknown parameter. Further extension of this approach is presented in (Azoury, 1985). Parameter estimation is considered in (Conrad, 1976). Liyanage and Shanthikumar (2005) propose the concept of operational statistics and apply it to a single period newsvendor inventory control problem. In this paper we consider the case, where it is known that the demand distribution function belongs to a parametric family of distribution functions. However, unlike in the Bayesian approach, we do not assume any prior knowledge on the parameter values. Conceptually, it is useful to distinguish between "new-sample" prediction, "within-sample" prediction, and "new-within-sample" prediction. For new-sample prediction, data from a past sample are used to make predictions of future outcomes from the same process or population. For within-sample prediction, the problem is to predict future outcomes in a sample or process based on early data from that sample or process. For new-within-sample prediction, the problem is to predict future outcomes in a sample or process based on early data from that sample or process as well as on a past sample data from the same process or population. Various solutions have been proposed for the prediction problem, that is, the problem of making inferences on a random sample $\{Y_j; j = 1, \ldots, m\}$ given independent observations $\{X_i; i=1, \ldots, n\}$ drawn from the same distribution. The Y_j's and the X_i's are commonly featured as "future outcomes" and "past outcomes" respectively. Inferences usually bear on some reduction Z of the Y_j's − possibly a minimal sufficient statistic − and consist of either prediction intervals or likelihood or predictive distribution for Z, depending on different authors. Kaminsky and Nelson (1998) discussed point and interval prediction of order statistics. Best linear unbiased predictors based on location-scale family of distributions are reviewed. Prediction intervals based on such predictors as well as those based on pivotals are studied. A brief discussion of Bayesian prediction is also given. Predictive distributions are found in the Bayesian framework (see Aitchison and Sculthorpe, 1965). Lawless (1982) applied the conditional method, which was first suggested by Fisher (1934) and promoted further by a number of others (Nechval et al., 2003; Murthy et al., 2004), to different problems relating to the Weibull and extreme value distributions. In practice the proposed methods have limited applications and it is the purpose of this paper to obtain predictive inferences concerning Z via the simple invariant embedding technique (Nechval, Nechval and Vasermanis, 2003; Nechval, Berzins, Purgailis and Nechval, 2008; Nechval and Nechval, Purgailis, 2011; Nechval, Purgailis, Nechval and Strelchonok, 2012; Nechval, Purgailis, Cikste, Berzins and Nechval, 2010). The obtained results are given below.

2   PREDICTIVE INFERENCES FOR FUTURE OUTCOMES

Let us assume that the random variable X follows the exponential distribution with the probability density function

$$f_\sigma(x) = \sigma^{-1}\exp(-x/\sigma), \quad \sigma > 0, \tag{1}$$

and the cumulative distribution function

$$F_\sigma(x) = 1 - \exp(-x/\sigma), \tag{2}$$

where σ is the scale parameter ($\sigma > 0$).

2.1 New-sample prediction

Theorem 1. Let $X_1 \le ... \le X_k$ be the first k ordered observations from the previous sample of size n from the exponential distribution (1) and Y_r be the rth order statistic in a set of m future ordered observations $Y_1 \le ... \le Y_m$ also from the distribution (1). Then the probability distribution function of the ancillary statistic Y_r/S_k is given by

$$\Pr\left\{\frac{Y_r}{S_k} \le \eta\right\} = \sum_{j=r}^{m}\binom{m}{j}\sum_{i=0}^{j}\binom{j}{i}(-1)^i \frac{1}{[1+(i+m-j)\eta]^k}, \tag{3}$$

where $S_k = \sum_{i=1}^{k} X_i + (n-k)X_k$.

Proof. The joint density of $X_1 \le ... \le X_k$ is given by

$$f_\sigma(x_1,...,x_k) = \frac{n!}{(n-k)!}\prod_{i=1}^{k}\frac{1}{\sigma}\exp\left(-\frac{x_i}{\sigma}\right)\exp\left(-(n-k)\frac{x_k}{\sigma}\right). \tag{4}$$

It is known that

$$S_k = \sum_{i=1}^{k} X_i + (n-k)X_k \tag{5}$$

is the sufficient statistic for σ. Then

$$V_k = S_k/\sigma \tag{6}$$

is the pivotal quantity, the probability density function of which is given by

$$f(v_k) = \frac{1}{\Gamma(k)}v_k^{k-1}\exp(-v_k), \quad v_k \ge 0. \tag{7}$$

Using the invariant embedding technique (Nechval, Nechval and Vasermanis, 2003; Nechval, Berzins, Purgailis and Nechval, 2008; Nechval and Nechval, Purgailis, 2011; Nechval, Purgailis, Nechval and Strelchonok, 2012; Nechval, Purgailis, Cikste, Berzins and Nechval, 2010), we reduce

$$\Pr\{Y_r \le y_r\} = \sum_{j=r}^{m}\binom{m}{j}[F_\sigma(y_r)]^j[1-F_\sigma(y_r)]^{m-j} = \sum_{j=r}^{m}\binom{m}{j}\left[1-\exp\left(-\frac{y_r}{\sigma}\right)\right]^j\left[\exp\left(-\frac{y_r}{\sigma}\right)\right]^{m-j} \tag{8}$$

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to

$$\Pr\left\{\frac{Y_r}{S_k} \leq \eta \mid v_k\right\} = \sum_{j=r}^{m}\binom{m}{j}\sum_{i=0}^{j}\binom{j}{i}(-1)^i \exp\left(-(i+m-j)\eta\, v_k\right), \tag{9}$$

where

$$\eta = y_r / s_k. \tag{10}$$

It follows from (9) that

$$\Pr\left\{\frac{Y_r}{S_k} \leq \eta\right\} = E\left\{\sum_{j=r}^{m}\binom{m}{j}\sum_{i=0}^{j}\binom{j}{i}(-1)^i \exp\left(-(i+m-j)\eta\, V_k\right)\right\} \tag{11}$$

$$= \int_{0}^{\infty}\sum_{j=r}^{m}\binom{m}{j}\sum_{i=0}^{j}\binom{j}{i}(-1)^i \exp\left(-(i+m-j)\eta\, v_k\right)f(v_k)dv_k = \sum_{j=r}^{m}\binom{m}{j}\sum_{i=0}^{j}\binom{j}{i}(-1)^i \frac{1}{[1+(i+m-j)\eta]^k}. \tag{12}$$

This ends the proof.

Corollary 1.1. A lower one-sided new-sample α prediction limit h on the rth order statistic Y_r in a set of m future ordered observations $Y_1 \leq \ldots \leq Y_m$ is given by

$$h = \eta\, S_k, \tag{13}$$

where η satisfies the equation

$$\sum_{j=r}^{m}\binom{m}{j}\sum_{i=0}^{j}\binom{j}{i}(-1)^i \frac{1}{[1+(i+m-j)\eta]^k} = \alpha. \tag{14}$$

(Observe that an upper one-sided $1-\alpha$ prediction limit h may be obtained from a lower one-sided α prediction limit by replacing α by $1-\alpha$.)

2.2 Within-sample prediction

Theorem 2. Let $Y_1 \leq \ldots \leq Y_l$ be the first l ordered observations (order statistics) in a sample of size m from a continuous distribution with some probability density function $f_\theta(x)$ and distribution function $F_\theta(x)$, where θ is a parameter (in general, vector). Then the joint probability density function of $Y_1 \leq \ldots \leq Y_l$ and the rth order statistics Y_r $(1 \leq l < r \leq m)$ is given by

$$g_\theta(y_1, \ldots, y_l, y_r) = g_\theta(y_1, \ldots, y_l)g_\theta(y_r \mid y_l), \tag{15}$$

where

$$g_\theta(y_1, \ldots, y_l) = \frac{m!}{(m-l)!}\prod_{i=1}^{l}f_\theta(y_i)[1-F_\theta(y_l)]^{m-l}, \tag{16}$$

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$$g_\theta(y_r \mid y_l) = \frac{(m-l)!}{(r-l-1)!(m-r)!} \left[\frac{F_\theta(y_r)-F_\theta(y_l)}{1-F_\theta(y_l)}\right]^{r-l-1} \left[1-\frac{F_\theta(y_r)-F_\theta(y_l)}{1-F_\theta(y_l)}\right]^{m-r} \frac{f_\theta(y_r)}{1-F_\theta(y_l)}$$

$$= \frac{(m-l)!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1}\binom{r-l-1}{j}(-1)^j \left[\frac{1-F_\theta(y_r)}{1-F_\theta(y_l)}\right]^{m-r+j} \frac{f_\theta(y_r)}{1-F_\theta(y_l)} \quad (17)$$

represents the conditional probability density function of Y_r given $Y_l = y_l$.

Proof. The joint density of $Y_1 \le ... \le Y_l$ and Y_r is given by

$$g_\theta(y_1,...,y_l,y_r) = \frac{m!}{(r-l-1)!(m-r)!} \prod_{i=1}^{l} f_\theta(y_i) [F_\theta(y_r)-F_\theta(y_l)]^{r-l-1} f_\theta(y_r)[1-F_\theta(y_r)]^{m-r}$$

$$= g_\theta(y_1,...,y_l)g_\theta(y_r \mid y_l). \quad (18)$$

It follows from (18) that

$$g_\theta(y_r \mid y_1,...,y_l) = g_\theta(y_1,...,y_l,y_r)/g_\theta(y_1,...,y_l) = g_\theta(y_r \mid y_l), \quad (19)$$

i.e., the conditional distribution of Y_r, given $Y_i = y_i$ for all $i = 1,…, l$, is the same as the conditional distribution of Y_r, given only $Y_l = y_l$, which is given by (17).This ends the proof. □

Corollary 2.1. The conditional probability distribution function of Y_r given $Y_l = y_l$ is

$$P_\theta\{Y_r \le y_r \mid Y_l = y_l\} = 1 - \frac{(m-l)!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1}\binom{r-l-1}{j}\frac{(-1)^j}{m-r+1+j}\left[\frac{1-F_\theta(y_r)}{1-F_\theta(y_l)}\right]^{m-r+1+j} \quad (20)$$

Corollary 2.2. Let $Y_1 \le ... \le Y_l$ be the first l order statistics in a sample of size m from the exponential distribution (1). Then the conditional probability distribution function of Y_r given $Y_l = y_l$ is

$$P_\theta\{Y_r \le y_r \mid Y_l = y_l\} = 1 - \frac{(m-l)!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1}\binom{r-l-1}{j}\frac{(-1)^j}{m-r+1+j}\left[\exp\left(-\frac{y_r-y_l}{\sigma}\right)\right]^{m-r+1+j}. \quad (21)$$

Theorem 3. Let $Y_1 \le ... \le Y_l$ be the first l ordered observations (order statistics) in a sample of size m from the exponential distribution (1), where the parameter σ is unknown. Then the probability distribution function of the ancillary statistic Y_r/Y_l is given by

$$\Pr\left\{\frac{Y_r}{Y_l} \le \frac{y_r}{y_l}\right\} = 1 - \frac{m!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1}\binom{r-l-1}{j}\frac{(-1)^j}{m-r+1+j}\left(\prod_{i=0}^{l-1}\left[\left(\frac{y_r}{y_l}-1\right)(m-r+1+j)+m-l+1+i\right]\right)^{-1} \quad (22)$$

Proof. We reduce (20) to

$$\Pr\{Y_r \le y_r \mid Y_l = y_l\} = 1 - \frac{(m-l)!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left[\exp\left(-\frac{y_l}{\sigma}\left(\frac{y_r}{y_l}-1\right)\right) \right]^{m-r+1+j}, \quad (23)$$

where Y_r / Y_l is the ancillary statistic whose distribution does not depend on the parameter σ, Y_l / σ is the pivotal quantity. Using the probability density function of Y_l / σ, we eliminate the unknown parameter σ from the problem as

$$\Pr\left\{\frac{Y_r}{Y_l} \le \frac{y_r}{y_l}\right\} = \int_0^\infty \Pr\{Y_r \le y_r \mid Y_l = y_l\} g(y_l / \sigma) dy_l / \sigma$$

$$= 1 - \frac{m!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left(\prod_{i=0}^{l-1} \left[\left(\frac{y_r}{y_l}-1\right)(m-r+1+j)+m-l+1+i\right] \right)^{-1}, \quad (24)$$

where

$$g(y_l / \sigma) = \frac{m!}{(l-1)!(m-l)!} \left[1-\exp\left(-\frac{y_l}{\sigma}\right)\right]^{l-1} \exp\left(-\frac{y_l}{\sigma}(m-l)\right) \exp\left(-\frac{y_l}{\sigma}\right)$$

$$= \frac{m!}{(l-1)!(m-l)!} \sum_{i=0}^{l-1} \binom{l-1}{i} (-1)^i \exp\left(-\frac{y_l}{\sigma}(m-l+1+i)\right), \quad (y_l / \sigma) \in (0, \infty), \quad (25)$$

represents the probability density function of the pivotal quantity Y_l / σ. This ends the proof. ☐

Corollary 3.1. A lower one-sided within-sample α prediction limit h on the rth order statistic Y_r in a set of m future ordered observations $Y_1 \le \dots \le Y_m$ is given by

$$h = \eta \, Y_l, \quad (26)$$

where η satisfies the equation

$$1 - \frac{m!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left(\prod_{i=0}^{l-1} [(\eta-1)(m-r+1+j)+m-l+1+i] \right)^{-1} = \alpha. \quad (27)$$

Theorem 4. Let $Y_1 \le \dots \le Y_l$ be the first l ordered observations (order statistics) in a sample of size m from the exponential distribution (1), where the parameter σ is unknown. Then the probability distribution function of the ancillary statistic $(Y_r - Y_l)/S_l$ is given by

$$\Pr\left\{\frac{Y_r - Y_l}{S_l} \le \frac{y_r - y_l}{s_l}\right\} = 1 - \frac{1}{\mathrm{B}(r-l,(m-r+1))} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left[1+(m-r+1+j)\frac{y_r - y_l}{s_l}\right]^{-l} \quad (28)$$

where

$$S_l = \sum_{i=1}^{l} X_i + (m-l)Y_l \tag{29}$$

is the sufficient statistic for σ.

Proof. Using the technique of invariant embedding (Nechval, Nechval and Vasermanis, 2003; Nechval, Berzins, Purgailis and Nechval, 2008; Nechval and Nechval, Purgailis, 2011; Nechval, Purgailis, Nechval and Strelchonok, 2012; Nechval, Purgailis, Cikste, Berzins and Nechval, 2010), we reduce (20) to

$$\Pr\{Y_r \le y_r \mid Y_l = y_l\} = 1 - \frac{(m-l)!}{(r-l-1)!(m-r)!} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left[\exp\left(-\frac{s_l}{\sigma}\frac{y_r - y_l}{s_l}\right) \right]^{m-r+1+j}. \tag{30}$$

where $(Y_r - Y_l)/S_l$ is the ancillary statistic whose distribution does not depend on the parameter σ, S_l/σ is the pivotal quantity. Since the probability density function of S_l/σ is known, we eliminate the unknown parameter σ from the problem as

$$\Pr\left\{ \frac{Y_r - Y_l}{S_l} \le \frac{y_r - y_l}{s_l} \right\} = \int_0^\infty \Pr\{Y_r \le y_r \mid Y_l = y_l\} g(s_l/\sigma) ds_k /\sigma$$

$$= 1 - \frac{1}{B(r-l, m-r+1)} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left[1 + (m-r+1+j)\frac{y_r - y_l}{s_l} \right]^{-l}, \tag{31}$$

where

$$f(s_l/\sigma) = (\Gamma(l))^{-1} (s_l/\sigma)^{l-1} \exp(-s_l/\sigma), \quad (s_l/\sigma) \ge 0. \tag{32}$$

This ends the proof. □

Corollary 4.1. A lower one-sided within-sample α prediction limit h on the rth order statistic Y_r in a set of m future ordered observations $Y_1 \le \ldots \le Y_m$ is given by

$$h = Y_l + \eta\, S_l, \tag{33}$$

where η satisfies the equation

$$1 - \frac{1}{B(r-l, m-r+1)} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j} \left[1 + (m-r+1+j)\eta \right]^{-l} = \alpha. \tag{34}$$

2.3 New-within-sample prediction

Theorem 5. Let $X_1 \le \ldots \le X_k$ be the first k ordered observations from a previous sample of size n from the exponential distribution (1) and $Y_1 \le \ldots \le Y_l$ be the first l ordered early observations from a new sample of size m also from the distribution (1), where the parameter σ is

unknown. Then the probability distribution function of the ancillary statistic $(Y_r - Y_l)/(S_k + S_l)$ is given by

$$\Pr\left\{\frac{Y_r - Y_l}{S_k + S_l} \leq \frac{y_r - y_l}{s_k + s_l}\right\} = 1 - \frac{1}{B(r-l,(m-r+1))} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j}$$

$$\times \left[1 + (m-r+1+j)\frac{y_r - y_l}{s_k + s_l}\right]^{-(k+l)}. \tag{35}$$

Proof. For the proof we refer to Theorems 1 and 4. □

Corollary 5.1. A lower one-sided within-sample α prediction limit h on the rth order statistic Y_r in a set of m future ordered observations $Y_1 \leq \ldots \leq Y_m$ is given by

$$h = Y_l + \eta \, (S_k + S_l), \tag{36}$$

where η satisfies the equation

$$1 - \frac{1}{B(r-l,m-r+1)} \sum_{j=0}^{r-l-1} \binom{r-l-1}{j} \frac{(-1)^j}{m-r+1+j}\left[1 + (m-r+1+j)\eta\right]^{-(k+l)} = \alpha. \tag{37}$$

3 INVENTORY MANAGEMENT PROBLEM AND PREDICTIVE INFERENCE

In this section, we consider a single-period newsvendor model. Single-period stocking decisions often occur in practice; these require the decision maker to choose the stocking level of an item for which demand exists for only a single period. Several factors affect this decision: the distribution of demand, the cost and price of the item, the salvage value of the item, and the loss of customer goodwill due to stockouts. The newsvendor model addresses this problem and develops a formula for what is usually called the 'critical-fractile'. The optimum order quantity is calculated using the critical-fractile of the distribution of the demand for the period. Underlying the mathematical simplicity of the critical-fractile formula is a powerful and intuitively appealing insight for the determination of the order quantity. The order quantity depends only on the optimum balance between two types of costs. The first is the cost per unit associated with the unavailability of stock to meet the manifest demand (i.e., underage cost). The second is the unit cost associated with excess inventory at the end of the period for which there is no demand (i.e., overage cost). Following Hadley and Whitin (1963), we review the single-period newsvendor model and provide a broader interpretation to the structure of its solution. The notation, we use for the newsvendor model, is given below.

Y	Random variable for single-period demand
$f_\theta(y)$	Probability density function of single-period demand
$F_\theta(y)$	Probability distribution function of single-period demand
θ	Parameter (in general, vector)
c_1	Unit selling price
c	Unit procurement cost, which is independent of the procured amount
g	Unit salvage value for unsold items remaining at the end of the period
c_2	Unit stockout penalty cost (over and above any lost profit)
u	Variable representing the order quantity

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u^* Optimal order quantity

$Q(u)$ Expected profit as a function of the order quantity

c_o Unit overage cost

c_u Unit underage cost

Different versions of the problem may equivalently consider expected opportunity cost minimization or expected profit maximization. We examine the latter and write the expected profit as

$$Q(u) = c_1 \int_0^u y f_\theta(y)dy + c_1 u \int_u^\infty f_\theta(y)dy - cu + g \int_0^u (u-y)f_\theta(y)dy - c_2 \int_u^\infty (y-u)f_\theta(y)dy. \quad (38)$$

Assuming that $c_1 + c_2 > g$ (which is generally true in most situations), we can show that the expected profit function $Q(u)$ is concave. We, therefore, set the first derivative equal to zero to find a maximizing solution. The value of u that maximizes (38) is the one that satisfies

$$F_\theta(u^*) = (c_1 - c + c_2)/(c_1 - g + c_2). \quad (39)$$

Clearly the lost contribution margin $(c_1 - c)$ plus the stockout penalty (c_2) represents the 'underage cost'. Similarly the item cost (c) minus the salvage value (g) represents the 'overage cost'. If we refer to the underage cost as c_u and the overage cost as c_o, we may rewrite (39) as

$$F_\theta(u^*) = c_u /(c_u + c_o). \quad (40)$$

We should choose the order quantity u^* such that the cumulative distribution function (cdf) of u^* equals the ratio of the underage cost to the sum of the underage and overage costs. A relatively high underage cost results in a higher order quantity, whereas a relatively high overage cost leads to a lower order quantity, as one would expect. If the single-period demand Y follows the exponential distribution (1) then

$$Q(u) = \sigma \left[(c_1 - g) - (c-g)\frac{u}{\sigma} - (c_1 - g + c_2)\exp\left(-\frac{u}{\sigma}\right) \right], \quad (41)$$

$$u^* = \sigma \ln\left(1 + \frac{c_1 - c + c_2}{c - g} \right), \quad (42)$$

and

$$Q(u^*) = \sigma \left[c_1 - c - (c-g)\ln\left(1 + \frac{c_1 - c + c_2}{c - g} \right) \right]. \quad (43)$$

Parametric uncertainty. Consider the case when the parameter σ is unknown. Let $X_1 \le \dots \le X_n$ be the past observations (order statistics) of single-period demands from the exponential distribution (1). Then

$$S = \sum_{i=1}^n X_i, \quad (44)$$

is a sufficient statistic for σ, S is distributed with

$$g_\sigma(s) = [\Gamma(n)\sigma^n]^{-1}s^{n-1}\exp(-s/\sigma) \quad (s > 0), \tag{45}$$

To find the best invariant decision rule u^{BI}, we use the invariant embedding technique (Nechval, Nechval and Vasermanis, 2003; Nechval, Berzins, Purgailis and Nechval, 2008; Nechval and Nechval, Purgailis, 2011; Nechval, Purgailis, Nechval and Strelchonok, 2012; Nechval, Purgailis, Cikste, Berzins and Nechval, 2010) to transform (41) to the form, which is depended only on the pivotal quantity $V = S/\sigma$ and the ancillary factor $\eta = u/S$. In statistics, a pivotal quantity or pivot is a function of observations and unobservable parameters whose probability distribution does not depend on unknown parameters. Note that a pivotal quantity need not be a statistic—the function and its value can depend on parameters of the model, but its distribution must not. If it is a statistic, then it is known as an ancillary statistic.

Transformation of $Q(u)$ is given by

$$Q(\eta \mid v) = \sigma\big[(c_1 - g) - (c - g)\eta v - (c_1 - g + c_2)\exp(-\eta v)\big]. \tag{46}$$

We find the expected profit for the statistical decision $u = \eta S$ as

$$E\{Q(\eta)\} = \int_0^\infty Q(\eta \mid v)g(v)dv = \sigma\big[(c_1 - g) - (c - g)\eta n - (c_1 - g + c_2)(\eta + 1)^{-n}\big], \tag{47}$$

where

$$g(v) = [\Gamma(n)]^{-1}v^{n-1}\exp(-v) \quad (v > 0). \tag{48}$$

The value of η that maximizes (47) is given by

$$\eta^* = \big[1 + (c_1 - c + c_2)/(c - g)\big]^{1/(n+1)} - 1. \tag{49}$$

Thus,

$$u^{\mathrm{BI}} = \eta^* S = \Big[\big[1 + (c_1 - c + c_2)/(c - g)\big]^{1/(n+1)} - 1\Big]S. \tag{50}$$

Comparison of decision rules. For comparison, consider the maximum likelihood decision rule that may be obtained from (42) as

$$u^{\mathrm{ML}} = \hat{\sigma}\ln\big[1 + (c_1 - c + c_2)/(c - g)\big] = \eta^{\mathrm{ML}}S, \tag{51}$$

where $\hat{\sigma} = S/n$ is the maximum likelihood estimator of σ,

$$\eta^{\mathrm{ML}} = \ln\big[1 + (c_1 - c + c_2)/(c - g)\big]^{1/n}. \tag{52}$$

Since u^{BI} and u^{ML} belong to the same class

$$\mathbf{C} = \{u : u = \eta S\}, \tag{53}$$

it follows from the above that u^{ML} is inadmissible in relation to u^{BI}. If, say, $c = 2$, $c_1 = 490$, $c_2 = 2$, $g = 1$ (in terms of money), and $n = 1$, we have that

$$\text{rel.eff.}_{E\{Q(\eta)\}}\{u^{ML}, u^{BI}, \sigma\} = E\{Q(\eta^{ML})\} \big/ E\{Q(\eta^*)\}$$

$$= \frac{(c_1 - g) - (c - g)\eta^{ML} n - (c_1 - g + c_2)\dfrac{1}{(\eta^{ML} + 1)^n}}{(c_1 - g) - (c - g)\eta^* n - (c_1 - g + c_2)\dfrac{1}{(\eta^* + 1)^n}} = 0.93. \tag{54}$$

Thus, in this case, the use of u^{BI} leads to a growth in the expected profit of about 7 % as compared with u^{ML}. The absolute expected profit will be proportional to σ and may be considerable.

Predictive inference. It will be noted that the predictive probability density function of the single-period demand Y, which is compatible with (38), is given by

$$f(y \mid s) = \frac{n+1}{s}\left(1 + \frac{y}{s}\right)^{-(n+2)} \quad (y > 0). \tag{55}$$

Using (55), the predictive profit is determined as

$$Q^{(p)}(u \mid s) = c_1 \int_0^u y f(y \mid s) dy + c_1 u \int_u^\infty f(y \mid s) dy - cu + g \int_0^u (u - y) f(y \mid s) dy - c_2 \int_u^\infty (y - u) f(y \mid s) dy$$

$$= \frac{s}{n}\left[(c_1 - g) - (c - g)\frac{u}{s} n - (c_1 - g + c_2)\left(\frac{u}{s} + 1\right)^{-n}\right], \tag{56}$$

which can be reduced to

$$Q^{(p)}(\eta \mid s) = \frac{s}{n}\left[(c_1 - g) - (c - g)\eta n - (c_1 - g + c_2)\frac{1}{(\eta + 1)^n}\right]. \tag{57}$$

It follows from (57) that

$$E_\sigma\{Q^{(p)}(\eta \mid s)\} = \int_0^\infty Q^{(p)}(\eta \mid s) g_\sigma(s) ds = \sigma\left[(c_1 - g) - (c - g)\eta n - (c_1 - g + c_2)(\eta + 1)^{-n}\right] = E\{Q(\eta)\}. \tag{58}$$

Thus, u^{BI} can be found immediately from (56) as

$$u^{BI} = \arg \max_u Q^{(p)}(u \mid s). \tag{59}$$

4 CONCLUSION

The technique proposed in this paper represents a simple and computationally attractive statistical method based on the constructive use of the invariance principle in mathematical statistics. The main advantage of this technique consists in that it allows one to eliminate unknown parameters from the problem and to use the previous and current data of observations for obtaining predictive inferences as completely as possible. We have illustrated the technique for the exponential distribution. Applications to other log-location-scale distributions could follow directly.

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A HEURISTIC MODEL TO AID THE WESTERN BUSINESS PEOPLE WORKING IN CULTURALLY DIFFERENT SOCIETIES TO ADJUST TO THE ENVIRONMENT

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ABSTRACT
This paper is based on an ongoing research project that investigates the factors that contribute to successful assimilation by Western professionals in different countries. The investigation which has utilised data collected from different case studies related to Japan and Hong Kong. Each case study deals with issues and challenges facing Western expatriates residing in these countries for the purposes of business. As part of this work, the researchers have developed, presented tested a heuristic model for quantifying and predicting a Challenge Index for Western expatriates in Japan and Hong Kong. The index can be used to determine the level of difficulty for living and working in these countries; or comparing a given situation with others. The findings indicate that an attempt to familiarise oneself with the basics of the local language (eg Japanese) and recognition and acceptance of certain attitude differences would certainly contribute to a successful adaption.

Keywords: Business, Expatriate, Heuristic, Model

1   INTRODUCTION

The main objective of this paper is to identify and present effective means of adopting suitable approaches and adjusting attitudes for the purpose of work in Japan and Hong Kong. The investigation is based on different case studies chosen from a large database of interviews in various countries and settings. The selected interviews for the analysis were the most appropriate cases related to Japan and Hong Kong. These cases are detailed and structured interviews with professionals, from a number of different countries, who reside and work in Japan or Hong Kong. These professionals have had experience in various fields and are presidents, directors, consultants, teachers or business owners. Hence, their experiential knowledge about the challenges and how to effectively overcome the issues are quite valuable. The interviews are extracted from the Acadia Multi-Media Case Management System (AMCMS). The entire system comprises 340 case interviews related to various fields in several countries.

The interviews have been analysed carefully and commonalities, in terms of challenges, have been identified to form the basis for building a heuristic model. The heuristic model can aid in predicting the Challenge Index for a prospective Westerner wishing to work and reside in Japan or Hong Kong. This model can also be utilised for the purposes of monitoring one's difficulty levels in a manner which allows performing what-if analysis or comparison with other similar scenarios.

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A number of research articles that inform this study are reviewed and the methodology used to collect and analyse the data sample is outlined.   A series of predictions are then presented based on insight from articles and the video interviews. The following sections of this paper demonstrate how the research was conducted, data was collected and the model was built.

2   NOTABLE LITERATURE

Differences between national cultures is a topic of interest to many. Popular among researchers are models that seek to explain and describe these differences. Two frameworks in particular inform this study. One of these was created by Dutch researcher Geert Hofstede and published in numerous studies over time (Hofstede, 1980; Hofstede, 1993). He classified countries based on the survey data collected in early 1970s' from over 100,000 IBM employees located in 72 countries. Initially 40 countries were classified. Further analysis of the data allowed three regions and ten other countries to be classified according to four dimensions of culture that he labeled uncertainty avoidance, masculinity, power distance and individualism. Research conducted a few years later uncovered a fifth dimension that was termed long term orientation.

This last dimension refers the acceptance by a culture of a long term and traditional view of time. Tolerance for ambiguity refers to the uncertainty avoidance dimension. The extent to which stereotypical male and female characteristics are found in a culture was capture by the masculinity dimension. The degree to which inequality is accepted in a society was termed power distance. Finally, whether the interests of the individual or the group take precedence is referred to as individualism.

Originating with the ideas of sociologist, Talcott Parsons, a fellow Dutchman Franz Trompenaars (1994) used survey data from 28 countries to categorize national cultures according to five bipolar dimensions. He used questions that posed different dilemmas of everyday life. Achievement as opposed to ascription refers to whether status is given or whether we need to prove ourselves. Specific as opposed to diffuse refers to whether we handle ourselves in predetermined ways or whether our relationships are contextual and changing. Neutral versus emotional refers to whether individuals display or hide emotions. Universalism as the opposite of particularism is concerned with whether rules or relationships take precedence. Finally, similar to Hofstede's model, individualism versus collectivism explores whether the needs of the individual or the group is dominant in a society.

These two models or frameworks of national culture differences are well known and have been popularised in many management textbooks. They also prove useful for explaining some of the experiences of the Canadian expatriates in Hong Kong.

3   DATA COLLECTION METHODOLOGY

The research sites of this study were Japan and Hong Kong. Opportunistic search was used to identify interview candidates who were residing and working in Japan and Hong Kong. These business people were engaged in both manufacturing and service industries. Prospective interviewees were contacted two months prior to the interview by e-mail to obtain their consent, arrange an interview date and location and pass on the survey instruction. Interviews lasted approximately 40 minutes. Typically 20 minutes were needed to set up equipment and 20 minutes were needed to take down the film set and depart. Interviewees were filmed from the chest up. The interviewer is not seen or heard in the interview.

The video interviews are hosted on the Acadia Multimedia Case Management System (AMCMS) which is a web-based, password protected, scalable platform designed for higher education business students and the corporate training market.

The video interviews form part of the Acadia International Executive Insight Series (AIEIS) collection.   At the time undertaking this research project, it hosted over 340 interviews and almost 7000 video clips.

4   DISCUSSION
This section provides a few examples of selected interviews and discussions.

Although Japan is regarded as one of the main democracies of the world, one must remember that it is a society in which people are ranked according to their social status or position at work. Hence, a totally different kind of relationships between people should be expected. As pointed out by Hofstede (1980), the fact that not all individuals in societies are equal expresses the attitude of the culture towards these inequalities amongst us. Hofstede (1993) also suggests that Japan is a hierarchical society. The hierarchical feature of the Japanese society does not imply inequity. Japan is a free country with its strong beliefs in their traditions and religions of mainly Buddhism and Shintoism. With regard to their traditional beliefs, one may refer to the Bushido concept which contains egalitarian principles that have allowed wealth to trickle down to the vast majority in Japanese society (Fujimura, 2011). The traditional religions have also had similar effects on the Japanese attitude in terms of equity and equality of human beings in their society. According to Taka et al. (1994): "In the case of Buddhism, every living creature is said to have an equal Buddha- hood, a Buddhahood which is very similar with the idea of numen and micro- cosm."

One must accept the fact that unlike Australia and Canada, Japan is not regarded as a universalist, rule based society but it is classed as a particularist society. For further reading refer to Trompenaars (1994).

It should be noted that often language and culture are interrelated as one influences the other. Culture's roots are deeply established in the years of tradition and history.

Insight from the interviews suggested that a lack of knowledge of the Japanese language can create a solitary situation for the Westerner who is trying to become part of the society.

While the culture of Hong Kong differs from the West one should remember that to a large extent, these differences do not pose a problem. Hong Kong can be labeled as multi-cultural rather than a uni-cultural society. According to Chan Kwok (2011), Hong Kong is an ideal place to witness how different forms of cultural hybridity are produced, promoted and consumed. Hence, Western attitudes are not foreign to the people of Hong Kong. A reasonably balanced combination of Eastern and Western cultures exist in Hong Kong. As noted by Yiu-wai Chu (2011), the "blend of East and West'' cliché́ was something that has been welcomed by the Hong authorities.

5   A HEURISTIC MODEL
The data analysis and evaluation of the selected cases led to the identification of a set of issues, themes and topics which in turn were grouped into a set of common challenges. For

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instance, in the case of Japan, the groups covered challenges such as learning basic conversational Japanese, attitudes of the Japanese people both at work and in social situations, commonly practised ways of handling long hours spent at work and on public transportation, and differences in dealing with formal situation. These challenges were then titled as Language, Culture, Transportation, Work Ethics and Red Tape. The cases were observed carefully again and the issues raised were recorded under each category.

For the purposes of Japan, the possible problems or challenges have been classified under five main categories. The rationale for this grouping is based on the frequency of issue topics mentioned in the interviews. The following is the main topics raised and discussed by the interviewees:
1). Language
2). Culture
3). Work Ethics
4). Transportation
5). Red Tape

It should be noted that the emphasis placed on each category and the frequency of its occurrence in the interviews was noted during the observation. As a result, the categories for the issues were ranked according to their importance. Language has the highest weighting and the Red Tape issue ranks number five.

These factors can be regarded as independent variables of our heuristic model and the Challenge Index will depend on these variables:

$$CI = \text{Function of } \{ L, C, WE, T, RT \}$$

Where: L = Language; C = Culture; WE = Work Ethics; T = Transportation; RT = Red Tape

In which, the independent variables in the model are assumed to have an additive effect on each other. The Challenge Index can be worked out by inserting a difficulty level as a percentage against each category. Guidelines on these percentages are provided for the user.

It should be noted that this model, as suggested above, provides a figure as a guide which can be used for comparison purposes with other expatriates. It can also provide an opportunity for performing what-if analyses. Hence, the user of the model can relax a factor, increase or decrease its percentage and then determine some guiding figures. If the person in question, for instance, decides that they have made some progress with the language and their difficulty for it deserves a lower percentage then they may choose a smaller percentage for a new CI calculation.

6 CONCLUSION

This paper has demonstrated how a heuristic model, based on facts and theory, can help a Western Business person living and working in a culturally different country. The model has the potential to be used for comparative or what-if analysis by someone who wishes to monitor and adjust the challenges and difficulties facing them in a different situation. For instance, an expatriate working in Japan would be able to compare his or her own difficulty for different conditions; or compare the calculated index with other fellow expatriates. Hence, they would be in a more informed position with regard to making the necessary adjustments.

It should be emphasized that the model is not intended to be an exact or optimisation based model but instead, a guide in the form of a heuristic model. It is envisaged to extend the developed model and apply it to other culturally non western countries too.

It is recommended to carry out further testing with additional data to improve the heuristic model. Hence, future research projects related to the future enhancement of this model are planned.

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GILT GROUPE: DESPERATELY SEEKING A NEW BUSINESS MODEL HOW DISCOUNT LUXURY SITES STRUGGLE IN THE ECONOMIC RECOVERY ERA[1]

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ABSTRACT
Gilt Groupe is a favorite website for luxury bargain hunters spending their lunch breaks with style. The company, founded in 2007, already has a well-established reputation and is expected to generate close to $1 billion in annual sales by the end of 2012. Its online platform uses the "flash sales" method, offering limited-time availability of high fashion, travel, home décor, and culinary bargains to its members. Membership, originally by invitation only, is now open to all. The idea of moving "sample sales" online was first realized on a European website, Vente-Privee.com, which now has more than 13 million customers. Following Gilt's introduction in the United States, flash sales skyrocketed and led to the launching of many new sites, which have proved popular both with consumers seeking impressive discounts on uber-luxury goods, and with exclusive brands wanting to unload their unsold stock quickly.

Keywords: *Branding, Discount sales, Distribution, Luxury products, Online retail*

1   INTRODUCTION

Gilt is an interesting case study of a successful, trend-setting player in the ever-challenging fashion industry. After its foundation, the company experienced a meteoric rise in online sales and even approached a possible public offering within its first five years. Yet, as the economy slowly began returning to normal and luxury overstock was less available, Gilt's business model seemed to become more vulnerable than sustainable. That, in combination with the intense influx of competitors, has led Gilt to try a variety of new ideas and new marketing strategies, seeking to build on its strong brand recognition and influx of investor money to expand and grow successfully. This research examines the state of the discount luxury market in the U.S. economy and analyzes Gilt's marketing and operations strategies in this lucrative yet complicated market segment.

2   OVERVIEW OF THE DISCOUNT LUXURY INDUSTRY

2.1   Discount Luxury Market and Gilt's Major Competitors

Gilt Groupe operates in an extremely competitive market where aggressive competitors fight for the same pool of customers and the same luxury good overstocks from the world's desirable brands. Despite Gilt's pioneering market entrance as the first "flash-sample reseller" on the web platform in the United States, relatively low market entry barriers allowed other sites to quickly get into the game and follow Gilt closely in terms of market size and revenue. The ease with which a website can be set up, without the major overhead costs of luxury brick-and-mortar stores, opened the gates to a flood of competitors. The biggest barriers to entry are the lack of available luxury inventory, which affected Gilt as well not long ago, and

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[1] Wesley Graf, my former Georgetown University student, contributed to the material and research presented above.

the desire of the most desirable brands to work only with carefully selected and well-established discount websites. The consequences of these barriers are evident in Gilt's business strategy, as the company constantly tries to innovate by rapidly expanding and enhancing its online offerings and mobile platforms. There are countless competitors emulating Gilt's business model, but we will focus on three major ones.

Because Gilt was the first site of its kind in the United States, its revenue, as demonstrated in Chart 1, has increased rapidly, staying consistently ahead of its competitors. After one year of operation, Gilt earned about $24 million in revenue. Three years later, that number exploded to $605 million, with many analysts believing it will surpass $1 billion in 2012 (http://www.ft.com/intl/cms/s/0/124b3b68-1386-11e1-9562-00144feabdc0.html#axzz1g9fpbXlD). Currently, with more than 5 million members, Gilt leads the domestic competition in terms of membership charts as well. Starting with luxury clothing for women, its business has expanded into many other categories, and currently includes men's and children's branded apparel, home and artisan products, fine food and wine, and appealing travel deals.

Chart 1: Financial Times, http://www.ft.com/intl/cms/s/0/124b3b68-1386-11e1-9562

Internationally, *Vente-Privee.com* was the first company to get into the discount luxury segment online, as early as2001. The company is the only competitor that exceeds Gilt in terms of all major financial indicators. Its membership base of over 13 million customers is almost three times larger than Gilt's. However, the site currently operates only in Spain, Germany, Italy, Austria, the United Kingdom, and Belgium, and thus has not been competing directly for U.S. customers. Potential still exists, owing to close relationships with more than 850 luxury European brands that allow the company to access highly regarded inventory and top-of-the-line products (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/).

RueLaLa (www.ruelala.com) is an American site launched in mid-2008. It has around 450 million members and makes an estimated $300 million in revenue by focusing almost exclusively on women's luxury clothing, with occasional offerings of home accessories and men's goods (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/). The company followed Gilt closely in terms of granting "members-only" access, garnered much media attention at a time when the press was focusing on Gilt, and quickly started to share Gilt's reputation and customer base.

Ideeli, another significant competitor, started in 2007, shortly after Gilt came onto the scene. The company has around 4 million members and revenue hovering around $200 million (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/).

Ideeli was one of the original competitors to succumb to the high pressure of the online luxury marketplace. The market rule suggests that when more competitors fight for the same inventory, luxury companies experience a decline in overstock and are less interested in reducing the wholesale price. It has become much more difficult to deliver the high end of luxury to consumers at a big discount. The CEO of Ideeli, Paul Hurley, began to move away from top luxury brands, on the theory that "with high-end retail, there's only so much inventory to work with. Scarcity is part of the high-end fashion brands' strategy" (http://www.reuters.com/article/2011/10/17/us-flashsales-idUSTRE79G41X20111017). The company now sells luxury items from the lower end, where the inventory is more readily available and the potential customer base is much larger, albeit less affluent.

2.2   The Threat from New Market Entrants

Luckily for Gilt Groupe, the discount luxury market is becoming more difficult to enter with success. Oversaturation of the market led to customer fatigue regarding any new market opportunity, and to a feeling among consumers that they already have enough choices, perhaps even too many, as our survey among young professionals in the Washington, D.C., area suggested. Additionally, strengthening in true luxury sales and abundant demand for overstocked items caused a decline in the inventory available for purchase by new entrants (http://www.reuters.com/article/2011/10/17/us-flashsales-idUSTRE79G41X20111017). The only significant player worth mentioning in this regard is Vente-Privee.com, the European founder of the flash-sales business model. This company's vast market experience and tight relationships with some of the world's most prestigious brands have helped it sustain popularity as it circumvents the scarcity issue. Recently it partnered with American Express, hoping to leverage the latter's 42 million customers for an early influx of American Express card holders (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/).

2.3   Threat of Market Substitutes

Substitutes in the discount luxury market come from two main sources. One such source is sites such as Fab.com, which are starting to gain popularity. Fab.com, a flash site similar to Gilt, has become popular because of its highly specialized and preselected unique items that customers could not readily find elsewhere. The site rarely sells clothing items and focuses mainly on high-end non-apparel designs such as visual art, gadgets, and lighting fixtures. It can be considered a substitute because it shows a trend among online consumers to move away from the Gilt business model, which offers a vast array of products that were available in luxury department stores a year ago. The attraction is to a highly curated service that creates the illusion of purchasing something worth buying from a source offering unique designs, rather than just products that used to be available at full price.

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Chart 2: Wall Street Journal

This new format works and, as suggested in Chart 2, more and more consumers are flocking to sites like Fab.com or Woot.com, another site offering one specific unique item a day that typically sells out in just in a few hours, rather than to Gilt, Ideeli, and similar competitors (http://online.wsj.com/article/SB10000872396390444097904577535323312754532.html?mod=googlenews_wsj#). Gilt's unique visits went up 24% from the year before to slightly above 1 million, the highest increase among industry competitors. Fab.com, by contrast, increased its unique visits from 129,000 to 2 million: a 16.56% boost. Obviously a shift is under way, in terms of what kind of "flash sale" site consumers want to spend their time and money on.

The other substitute comes from the full-price luxury market. As the global economy slowly recovers, the luxury goods market is experiencing robust growth. LVMH, owner of Louis Vuitton and other posh brands, recorded net profits up 28 percent in 2011 over 2010, which already was a strong year (http://view.koreaherald.com/kh/view.php?ud=20120730000733&cpv=0). PPR, owner of Gucci and Yves Saint Laurent, saw a sales increase of 17%. Jumps in luxury sales across the board reflect an influx of customer spending in designer boutiques and department stores such as Neiman Marcus, Saks Fifth Avenue, Nordstrom, and Bloomingdale's, as well as on their transactional websites. Additionally, Net-a-Porter.com, the most prestigious online seller of full-price luxury goods, has been seeing huge increases in its net profits and importance in the industry (http://view.koreaherald.com/kh/view.php?ud=20120730000733&cpv=0). As consumers are earning more money again, they are willing to step away from discount sites such as Gilt, where they had a chance to buy—and fast—a limited supply of not-quite-flashy and possibly ill-fitting merchandise, to full luxury retailers where they can get what they want on their own terms. One of Gilt's core strategies, the "flash sales" model, certainly offers business advantages but forces consumers to respond immediately, and buy before the item is gone forever. With more money in hand, many consumers are more likely to forego this "competitive shopping" opportunity and make more meaningful, thoughtful, and "experiential" purchases at full price in luxury stores.

2.4 Bargaining Power of Customers

Customers can exert pressure on Gilt, given the availability of a vast number of competitors offering similar products in a similar format. A customer who is unhappy with Gilt can simply switch to another reseller such as RueLaLa, Vente-Privee, or the hundreds of others that have emerged since the rise of Gilt. As Gilt struggles to offer the 70% discounts of its early days

and increasingly shifts to discounts of 40-50%, consumers are likely to desert and switch to other competitors or substitutes, such as department or specialized stores that offer them exactly what they are looking for. Given the free membership at Gilt and other competitors, switching costs the consumer nothing. Because most customers are highly price-sensitive, they were willing to endure the downsides of Gilt (last season's designs, rushed and competitive shopping) when they were getting impressive discounts, but as discounts lessen and consumers have more discretionary money, they can exercise more power over the company in the marketplace.

2.5   Bargaining Power of Suppliers

One of the biggest problems facing Gilt is the power of its suppliers. The founders admit that when starting the site, their greatest difficulty was persuading luxury brands to let them sell goods online at a huge discount (http://online.wsj.com/article/SB10001424052748703792704575366842447271892.html).   If that was difficult during the recession, it has become even more so as the luxury market strengthens. In Gilt's initial phase, as the recession began to hit luxury brands hard, overstock inventories sometimes ballooned by a factor of ten, to a level totally unfamiliar to these companies (http://www.reuters.com/article/2011/10/17/us-flashsales-idUSTRE79G41X20111 017). That led to a situation where Gilt faced "adequate supply, great pricing, and brands willing to talk to them," according to Steven Dennis, founder of Sageberry Consulting, which researches online retail markets (http://www.reuters.com/article/2011/10/17/us-flashsales-idUSTRE79G41X20111017). Times have changed, however. Companies have learned to scale down production to avoid such extreme inventory excesses (http://www.businessoffashion.com/2011/12/the-rise-stumble-and-future-of-gilt-groupes-busi ness-model.html). The merchandise stocks that they currently have and are willing to sell also have many potential buyers, as opposed to just Gilt. That has driven wholesale prices up, and Gilt, which averaged 70% discounts in the beginning, now offers average discounts of 40-50%, with suppliers no longer forced to settle for rock-bottom pricing (http://www.reuters.com/article/2011/10/17/us-flashsales-idUSTRE79G41X20111017).   Even more distressing, suppliers of top luxury brands no longer feel the need to sell to Gilt or other web platforms at all, and that has caused the online selection of brands to suffer. Years ago Gilt was selling brands like Zac Posen and Gucci for women at a discount.

A quick look at the site now shows that many of the brands are ones that most consumers would not readily recognize. The combination of an influx of competitors and a dwindling supply of luxury overstock has allowed suppliers, once grateful price takers, to become price setters (http://www.businessoffashion.com/2011/12/the-rise-stumble-and-future-of-gilt-grou pes-business-model.html). As the economy grows even stronger, luxury brands will want to rebuild their sense of exclusivity by discontinuing, not reselling, their goods. For instance, Lela Rose, a sought-after fashion designer with dresses priced between $1,000 and $10,000, used to sell her products on Gilt. However, she succinctly expressed suppliers' worries by suggesting, "[Consumers] might be saying, 'That's what I bought when I had no money,' and now they're used to paying the sale price" (http://www.businessoffashion.com/2011/12/the-rise-stumble-and-future-of-gilt-grou pes-business-model.html). But now luxury brands do not worry about customers' willingness to pay full price when they have more money in their pockets.

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3 MARKETING STRATEGIES OF GILT

3.1 Product Strategy

As already stated, Gilt Groupe is an online retail service that brings members discounted luxury goods in a "flash sale" style of shopping experience. Gilt announces upcoming sales via urgent email to all members, and begins selling at noon each weekday, with all merchandise 70% off the retail price.

Figure 1: Presented by using logos from Gilt's sites

Most sales last for 36 hours, but merchandise often sells out sooner, given the limited quantity and the high demand. In fact, over 50% of revenue comes within one hour of the start of the sale (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/). This sense of urgency is a huge part of what makes Gilt so successful, and it is a key part of the product and promotion strategies. Consumers get on the site and recognize that they have a very limited amount of time to get products at steep discounts before they are gone. Thus they are much more likely to make impulse purchases, and they lack the luxury of time to weigh their options. Initially, Gilt started these flash sales only for women's clothing and only for a small membership base: originally, 15,000 members personally invited by Gilt's founders, Alexis Maybank and Alexandra W. Wilson (http://online.wsj.com/article/SB10001424052748703792704575366842447271892.html). As the business grew, however, Gilt's product changed to include many more services, as well as unrestricted membership. These changes began around the time of the launch of Gilt Man site, the same business model selling men's clothing and accessories. Figure 1 shows Gilt's current full range of product lines. Obviously the brand has expanded far beyond women's clothing, and now offers a variety of products at a range of discounts. All the sites have a very luxurious visual appearance, featuring black backgrounds and highly styled professional photos. They also are curated to suggest that customers are getting a selection of only the best products, and Gilt's latest endeavor, Park and Bond, has largely separated itself from the Gilt brand name altogether.

3.2 Price Strategy

Gilt's pricing is one of the most important factors in the rise of the brand image. Gilt Groupe's

"bread and butter," Gilt.com, offers women's, men's, and children's clothing, as well as home decor and gifts, at between 50 and 70% off retail prices. Additionally, selling to Gilt gives sellers an opportunity for a quick influx of cash, always welcomed by many smaller brands and frequently helpful to almost all brands in the depths of the recession. Gilt typically buys the product at 50% off wholesale price. As retailers typically markup clothing from the price they have paid, the wholesale price equals half of the retail price. By purchasing at half the wholesale price, Gilt can double the price it pays and still sell at 50% off the retail price. When purchasing extra-large orders, Gilt can get goods even lower, at less than 50% of the wholesale price, and thus can offer discounts in the 70% range (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/).

Some of their other product lines offer smaller or no discounts: Park and Bond offers no discounts, Jetsetter offers some full-price travel packages, and Gilt Taste offers limited discounts, if any. They justify these full prices by offering very exclusive selections of goods, to give members the additional benefit of seeing only the crème de la crème of men's clothing, travel experience, and artisan food and wines, respectively.

3.3   Place Strategy

Gilt has always excelled in the "place" arena. Its storefront is completely online and therefore open 24/7 to customers. Its website is a case study in exuberant elegance and sophistication. The site is divided into different categories by tabs at the top, allowing members to look only at the sales relevant to them. Most men, for example, have no need to see the newest women's sales, and upon login are immediately directed to the Gilt Man dedicated section. The photography is extremely professional, and the cover photos for the sales look more like the ads in glossy magazines than the photos typically found on a retailer's website, whether discount or full-price.

Additionally, Gilt put a strong early effort into developing dedicated mobile applications so that consumers can shop on the fly. Given the urgency of the flash sales, which start promptly at 12 p.m., the mobile app allows customers who may not have computer access at the moment to quickly get on their iPhones, iPads, Blackberries, or Androids and rapidly browse the site. As seen in Chart 1, up to 30% of Gilt's revenues come from purchases via mobile apps. Even more extraordinary, Gilt sees up to 50% of its revenues coming from the apps on holiday weekends, such as July 4th, when consumers are traveling or on the beach and do not necessarily have access to computers (http://bits.blogs.nytimes.com/2012/06/29/gilt-groupe-mobile/). Gilt also innovates constantly in the mobile arena. A new version of the app will allow customers to upload photos of themselves and then "try on" items like sunglasses (http://bits.blogs.nytimes.com/2012/06/29/gilt-groupe-mobile/). While that may sound gimmicky, it gets consumers excited to get on the app and try it, and, of course, more customers lead to more sales.

One weakness worth mentioning is the occasional problem of the website's functionality. When there is a highly publicized and desirable sale, as when the site offered Christian Louboutin or vintage Hermès bags, the site crashes or is extremely slow. Given the limited quantities and the first-come-first-served nature of flash sales, this can be problematic for customers who are set on a product but find that it has sold out by the time the page loads. With the exception of this infrequent problem, Gilt's accessibility is one of its greatest strengths.

3.4   Promotion Strategy

Gilt's promotion has been widely talked about in the media because its marketing has stayed "under the radar," without any advertising campaigns or commercials. Additionally, the company's intense focus on gaining a desirable membership base helped spread the word to affluent customers and helped reassure luxury brands that Gilt was protecting their exclusivity. Once the site had funding and was up and running, the founders sent out invitations to 15,000 of their colleagues from the Harvard Business School, friends from their undergraduate-degree universities, and fashion industry gurus from whom they gained retail and   business   experience (http://online.wsj.com/article/SB10001424052748703792704575366842447271892.html).

Chart 3: Forbes

They targeted this market because these people were exactly the demographic they hoped to reach: wealthy, educated, and young, like the founders themselves. From there, the only way to gain membership was by referral from an existing member, who got a $25 gift certificate for inviting friends. It was an ingenious way to gain members, as all the new members were connected with the initial group of highly desirable customers. The strategy paid off in spades. As seen in Chart 3, membership skyrocketed, with more than 75% of subscribers referred to the website by members (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/). Now, with over 5 million members, Giltworks with the exact demographics that it initially desired. Customers are young, rich, and educated; 65% are younger than 35; 67% have an income in excess of$150,000; and 87% have bachelor's degrees (http://www.forbes.com/sites/matthewcarroll/2012/01/05/the-rise-of-gilt-groupe-part-3/4/). The founders were also wise to make themselves the "face" of the company. They are good-looking, young, and smart, and they felt that including personal notes in all packages and emailing members to offer personal selections would make their company more relatable. As they said in their book, "We knew that increasing our visibility would help us personalize and build trust in the brand. Gilt wouldn't be a faceless corporate behemoth like most online retailers. Instead, it would have a friendly human face, despite being a brand most customers interact with only via their computers" (Maybank and Wilkinson, 2012).

Guilt owners also went on a "tour" of sorts by holding upscale events whenever they traveled to a new place, and hosting private dinners for Gilt's most loyal customers, as well as bloggers, journalists, and tastemakers. They followed up by sending handwritten notes to those whom they had met and, as a result, they were featured in countless media pieces across the country (Maybank and Wilkinson, 2012). Their marketing strategy was a smart way to grow both the company and its aura of brand exclusivity. By deciding to offer membership to a limited group at first, they were able to avoid overwhelming the site and to grow slowly and

consistently, while building a base of loyal customers.

4   CONCLUSION

Gilt has many challenges in the years ahead, as well as many undiscovered opportunities. For one thing, the business of flash sales, with its dwindling suppliers, is responsible for only 35–50% of Gilt's total business today. Now designers are being asked to make inventory especially for Gilt, goods never available in stores, using the designer's own extra fabrics and supplies. This opens up for Gilt a whole new market that nobody else has been thinking about (Thau). Thus the company can offer new, exclusive goods while still ensuring a great online discount.

Gilt should also continue to expand its full-price brands. Park and Bond has had great success in selling high-priced men's clothing, and such an opportunity also exists for women's apparel. Gilt's competitor Net-a-Porter has become an icon, creating a market for luxury women's online retailing that did not exist before. With only one other major player in the high-end luxury brands, Gilt can tap its resource of vendors and brand relationships in that market.

Gilt's services, already top-notch, can be translated into quality media editorial content on fashion, which gives full-price customers added value and reason to shop. Park and Bond has already teamed up with men's magazine *GQ* to offer "Editor's Selections" and editorial content, which immediately gives Park and Bond a share in *GQ*'s excellent reputation for men's style. Gilt Taste has partnered with *Gourmet Magazine* for a similar reason and hired Ruth Reichl, one of the country's most respected food critics, to provide editorial content and recommendations for the foods they sell. That gives consumers confidence, and gives Gilt Taste brand equity by relating it to such a respected fashion magazine (http://techcrunch.com/2011/05/18/gilt-taste-a-pricey-online-marketplace-for-artisan-foods/).

Continuing to build connections with great magazines and brands will help spread the word about Gilt, and it will give consumers the added benefit of top-quality publicity when shopping for Gilt brands.

Gilt also has global opportunities that it is just beginning to explore. If it is successful, the growth potential overseas is obviously enormous, so it is crucial that the company expand carefully and thoughtfully. Gilt is offering free international shipping and returns for a limited time to entice new customers in many countries to try its products. The company is working diligently to master the intricacies of international shipping, going as far as to call it "step number one in going global," so that it can understand the international market (http://www.ft.com/intl/cms/s/0/124b3b68-1386-11e1-9562-00144feabdc0.html#axzz1g9fpbXlD). It must look into partnerships abroad, so that it can work with successful businesses, possibly acquire the companies of possible competitors, and instantly become a large presence abroad.

Finally and less obviously, Gilt needs to leverage its immense customer research tools. The company has been collecting customer data since its inception. It looks at everything from age and gender to the types of products customers buy and how to customize the email message each user gets daily so that it displays only the sales most relevant to the user in question (http://www.businessoffashion.com/2011/12/the-rise-stumble-and-future-of-gilt-groupes-business-model.html). If it shares this information with its vendors and partners, it will be able to

leverage this data into a significant cash flow as well as to revitalize the relationships with some of the luxury vendors that no longer work with the company (http://www.ft.com/intl/cms/s/0/124b3b68-1386-11e1-9562-00144feabdc0.html#axzz1g9fpbXlD).

The company obviously has been extremely successful by searching for opportunities everywhere and seizing them. As the market changes, the company has enough drive, intelligence, money, and prospects to adapt successfully to the new economic situation and continue to run an innovative fashion business model on a global scale.

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THE INFLUENCE OF BUSINESS PROCESSES ON ORGANISATIONAL BEHAVIOUR: AN ILLUSTRATION OF THE CROATIAN HOTEL INDUSTRY

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ABSTRACT

Organisations look for new ideas and sources of competitive advantage, and in the ever more significant service sector it is particularly important to ensure organisational behaviour. This research is an attempt to examine the impact of business processes on organisational behaviour. The purpose of this study is to determine the hospitality leaders' attitudes toward the evaluation of well-defined business processes as a precondition for good organisational behaviour. In addition, the results showed that the canonical correlation analysis of the relationship between groups of the business process and organisational behaviour variables is significant, as well as that well defined business processes are the strength of organisational behaviour.

Keywords: Business processes, Hotel industry, Management, Organisational behaviour

1   INTRODUCTION

Assuming that competition in the past, the present and the future is not competition between products or services, but competition between the skills of process thinking of employees who created processes, who created products and/or services, or those who generated cash flow and accumulated company assets (Vujica Herzog, 2007, p. 5811), we reveal the importance of viewing business processes as a basis for competitive advantage. On the other hand, certain processes and behaviours give life to organisations (Ivanchevich, Konopaske and Matteson, 2011) and thereby influence organisational behaviour. In this respect, the studies of the consulting company Gartner between 2005 and 2009 identified the business process improvement as the number one priority of top management (Reiter et al., 2010, p. 3). Whereas today authors (Krainc and Miočić, 2006; Thompson and Martin, 2010; Buble et al., 2010) consider business processes to be the backbone of modern organisations.

In order to achieve the best operating practices, it is necessary to understand which activities and methods actually produce the desired outputs (in terms of increasing competencies and real changes in the way we work) (Kujansivu and Lönnqvist, 2008). Rummler and Brache (1990) suggest the organisation of activities in such a way that the organisational activities are linked by coordination mechanisms: mutual adjustment, direct supervision and standardisation. In this respect, standardisation makes a substantial contribution, because it plans and implements standards and procedures that govern work performance with an aim to standardise behaviour, standardise outputs, standardise skills and norms (Wagner and Hollenbeck, 2010, pp. 238–241). Apart from the above, it is important to note that the basic

mechanisms of coordination are in the continuum, that is to say, when standardisation is achieved the process does not stop but returns to the beginning to repeated mutual adjustment due to, for instance, new circumstances.

The role of the system in organisational behaviour, in the present circumstances, is to manage individuals and groups in organisations to achieve maximum effect, but also to describe, understand and manage flexible but formal organisational structures. In systems, particular attention is paid to the analysis of how the nature of work and differently designed organisations influence the activities of human resource management as well as those of directing organisational behaviour. The concept itself is related to employees' perception of the goals and their clarity, group membership, level of cooperation, autonomy, etc. In other words, managing organisational behaviour means understanding: (1) individuals in the organisation, (2) group and organisational processes, and (3) intergroup relations in the organisational context. However, if the process workflow cannot be implemented in a structure which supports and enables the achievement of outputs, primarily user-oriented ones, work does not make sense, in other words, by mapping work with people, job roles must cover everything - from the causes of events to the output intended for the users/stakeholders as well as all the sequences in-between (Burlton, 2001, p. 61). Aytulun and Guner (2008) consider an organisation to be a network of processes whose interaction achieves a defined purpose, and its advantage is focused on customer satisfaction, improving speed and efficiency, rapid adaptation to the environment, reducing boundaries between departments, seeing all the activities, increasing participation of employees and reducing costs, that is, influencing the elements of organisational behaviour.

The service sector as a whole has grown in importance over the past decade. However, from the management perspective, all efforts are put to achieve higher levels of employee service delivery performance, because of the impacts on service quality, customer satisfaction, as well as on the financial performance of organisations. The research was focused on examining the influence of business processes on organisational behaviour. The purpose was to determine the attitudes of the hospitality leaders in the Croatian hotel industry towards the evaluation of well-defined business processes as a precondition for good organisational behaviour. The purpose of the research is primarily set with regard to the today's management's concern over achieving suitable organisational context, all this in order to achieve willing organisational behaviour, in other words, to: *improve employee productivity, ensure job satisfaction, reduce fluctuation, reduce absenteeism, improve willing organisational behaviour, that is, minimise deviant organisational behaviour.* The main hypothesis was that: well defined key business processes positively affect the desired organisational behaviour.

2 LITERATURE REVIEW

2.1 Business processes

The problem area of business processes has become all the more important as business circumstances have become more complex since mere adjustment to the environment has become a challenge for organisations. By moderating levels and links, companies use the process management techniques to strengthen and create valuable hard-to-copy relationships as well as the complementarity between processes (Benner, 2009, p. 474). Under the influence of the environment, organisations are constantly reminded of the need to understand their own business processes, management boards demand - process analysis, certification agencies require - process analysis, competition compels us to – analyse business processes etc.

(Graham, 2004). In other words, appreciating defined business processes (Management Centre Europe, 2010, p. 4) has become a part of company's culture, however, it can also become a major obstacle to change. Why? Every company at any stage of its development by analysing and modifying business processes ensures the achievement of strategic orientation – e.g. increased productivity, cost minimisation, reduction of social consequences, reduction of environmental emissions and the like. Most successful companies achieve this through more effective and innovative business processes which reduce costs, increase efficiency and ensure the quality of the product, ensure job satisfaction, lower fluctuation and absenteeism. In other words, by improving business processes they ensure proper use of companies' resources. A major shift in the process approach occurs, because instead of the functional approach and job descriptions, the process approach focuses on organisational role. In this way a job position is not described through tasks but through process activities. The process approach itself requires the construction of business processes that take place in the organisation. In this way, the organisation becomes more compact and more resistant to changes in the market and is able to respond quickly to market demands, as well as to optimise its business activity. Furthermore, it becomes obvious that almost everything is a process and that business processes have a key role in the economic survival of organisations (Harrington, 1991). The overall characteristics of processes are that they include change; they develop through time; they are composed of a group of events; they are mostly only identified through internal complexity that exists in a given time; they may be owned and depend on the environment, in other words, usual procedures may evolve over time. The first step in defining the processes themselves is to understand where a process begins and ends. A process begins with a "trigger" that causes the activity which is carried out by a person or a group of persons (team, department, etc.), and ends when it develops into another process, passes onto another person or group. An interesting feature about the process approach is that almost always one person plays two roles - the user and the process performer. Rummler, Ramias and Rummler (2010) also noted that documenting processes is not necessary because it takes too much time, extensive materials are not read and written materials cannot be updated, etc. However, they do believe that processes should be defined or captured in the actual performance and designed according to a particular need, which means they should be documented with a purpose, and the purpose should form the document and dictate the requirements in terms of usefulness (Rummler, Ramias and Rummler, 2010, p. 14). And in an organisation, as a natural model, this means describing processes. Business processes in companies are usually less focused on tasks (Nilsson, Tolis and Nellborn, 1999) and more on people. Process orientation contributes to clarifying the roles of employees and encouraging their involvement in improving work performance. Moreover, the process theory (Buchanan and Huczynski, 2010, p. 22) is an approach to explain organisational behaviour based on narratives which show how many factors, combining and interacting over time in a particular context, are likely to produce the outcomes of interest (Buchanan and Huczynski, 2010, p. 22). In addition, as one of the core topics in organisational behaviour, Robbins, Judge and Campbell (2010, p. 8) include business processes alongside motivation, leader behaviour and power, interpersonal communication, group structure, learning, attitude development and perception, change processes, conflict, work design and work stress.

2.2   Organisational behaviour
According to Wagner and Hollenbeck (2010, p. 5) one of three important considerations is that organisational behaviour assesses the 'behaviour' of groups and organisations per se. Nevertheless, there are events that occur in organisations that cannot be explained in terms of individual behaviour. Such events must be examined in terms of group or organisational

processes. Accordingly, the individual, the group, the organisation and the environment collectively influence behaviour in organisations (Mullins, 2010, p. 6). Organisational behaviour focuses on *improving productivity, reducing absenteeism and fluctuation, as well as reducing deviant behaviour, but also on encouraging organisational citizenship behaviour and job satisfaction* (Robbins, Judge and Campbell, 2010, p. 26). Organisations are trying to find a measure of structural support that would ensure streamlined and desired organisational behaviour. In the philosophy of organisational behaviour we could apply the idea that, in some way, the organisation and the management have to ensure that everyone in the organisation is a winner, that people focus on the key elements of their work and understand their contribution to the overall success of the organisation. Organisational behaviour as an area of management is the result of interaction and interdependence between the variables of formal organisation and the human factor variables (Mittal and Kumar, 2001). The variables of formal organisation are composed of three basic interdependent and interactive elements: structure, process and technology, while the human factor variables consist of: biological and psychological structure, physiological processes and personality (Mittal and Kumar, 2001), both groups of variables depend on organisational dynamics, conflict, changes and adaptation. The reasons for managing organisational behaviour primarily lie in the realisation of strategies and organisational goals and achieving organisational success. One of the answers is to set organisation's business processes as the foundation of organisation's system: teamwork, cross-functionality that will ensure the importance of each employee, encouraging corporate citizenship behaviour, i.e. helping new employees, etc. The objective (Bartlett and Ghoshal, 1997) is to develop and maximise the collaboration between individuals in the system (processes) in order to develop additional value to the company. The mere awareness of the process ensures the removal of barriers between organisational units and individuals. Mullins (2010, p. 9) suggests an integrative model of organisational behaviour that includes: organisational mechanisms, group mechanisms, individual characteristics, individual mechanisms and individual output. In other words, one way to bring about a change in the management of organisational behaviour is to ensure a managed organisational context through the organisation's business processes.

Regardless of what the organisation does, especially in the service sector, employees help achieve the envisaged business processes because business performance has its "undefined side" - certain organisational behaviour. Between the simple (repetitive procedures) and complex (unpredictable activities) there is always room for designing and improving the domain of the process that will help improve certain conditions, the level of good practice, cause and effect relationships, etc. The process areas at management levels are: *concern for people in the organisation, communication and coordination, performance management, training and development, compensation and work environment that contributes to the desired organisational behaviour*. The recent trends in the design of work are: self-creating work, employees are allowed to create their work in accordance with organisational goals, which means they are free to innovate their work, etc., however, this is rarely applied in practice; self-organizing teams, the manager does not allocate tasks to individuals but to a group, and they decide themselves how the work will be done, this allows greater autonomy (this is also rarely applied in practice, with some difficulty in the performance), flexibility in work performance, possibility of modifying amounts, product range, product specification (possibility of upgrading and expanding capacities, possibility of redeploying equipment). Roberts (2010) states that the process improvement efforts designed to ensure speed cannot achieve the expected results in the organisation if people go slowly, so that the present

performance is focused on human-based processes, especially due to the complexity of the performance and the awareness of the situation as well as the response to the environment.

Human behaviour can be analysed as a process of "continuous, independent sequence of actions" and understanding this process is necessary in order for the organisations to understand what changes the structure needs (Mullins, 2010, p. 62). Becoming familiar with the events that initiate processes and focusing on the people can be provided by managing organisational behaviour in the future. The nature of management requires from individuals and groups to be familiar with the processes, tasks and responsibilities and the organisation itself, as well as the management of the dynamics of organisational behaviour. According to Clark (2005, p. 318), performance management basically indicates the framework for organisation's human resources that directs, supervises, motivates and redefines organisational behaviour, for Brumback (1998, p. 265) performance means both behaviour and results, because behaviours represent an important output of the organisation (referenced by Torrington, Hall, Taylor and Atkinson, 2009, p. 101). By merging business processes (which come from the prescriptive approach) and people (who deal more easily with and support the emergent approach) we develop a need to analyse the interdependence of these two poles and bring them closer in order to achieve the desired organisational results, that is, the organisational behaviour which will ensure long-term sustainability.

3   FINDINGS

3.1   Research methodology

Fundamental theoretical hypothesis was empirically explored on a sample taken from the selected branch of activity - hotel industry (H 551) in the Republic of Croatia, according to the National Classification of Activity. The database register of business entities of the Croatian Chamber of Economy (CCE) and Business Information Centre (Homepage) were used in collecting the relevant data on companies in the industry for the year 2010. The field study was conducted by using a dynamic system of web based questionnaires with the questionnaire domain that was forwarded in an e-mail inviting the recipients to fulfil the questionnaires in October 2011. The sample includes 70 most successful companies that contribute to the creation of added value, assuming they really contemplate organisational improvement and seek to improve structural elements. Out of 70 companies from the sample, 58 responded to our research, however, only 28 companies provided all the required information.The questionnaire "The impact of business processes on organisational behaviour" was developed as a research instrument. The questionnaire examined quantitative variables in addition to qualitative questions that were taken in their original form to clarify the considerations about the research problem. The examinees from the strategic level of management were asked to express their level of agreement with a particular statement on a one-to-seven Likert scale ranging from Strongly disagree (1 - *not at all*) to Strongly agree (7 - *to a large extent*).

In this paper, we use descriptive statistics and Canonical Correlation Analysis to understand better the complexity of the working environment phenomenon. The analyses were made by using the statistical data analysis software Statistica, version 7.0 and SPSS for Windows, version 15.

3.2 Research implications

The oldest company was founded in 1935, and the youngest in 2011, and the range of ages is wide because of the consolidation of changes in the Croatian hotel industry that has taken place in recent years. 37% of the companies find themselves market leaders, 14.6% find themselves market challengers, and 48.1% of the companies consider themselves to be market followers. During the season the companies employ up to 2500 people, and the average number of employees is 300. The examinees in 66.7% of cases were male, and 33.3% female. Most examinees, 85.2%, are responsible for multiple functional areas, 44.4% belong to top management (44.4%) and 55.6% to medium level management. The most frequently applied quality management system is ISO9002 (64.7%), benchmarking (47.1%), total quality management (41.2%). 17.6% of the companies use business process reengineering. The observed companies (N = 58) in 58.8% of cases provide a large number of completely different services, and the organisational structure in 51% of cases is function-based, while only four companies, that is 7.8%, have a process-based organisational structure. Considering the fact that more than 50% of the companies retain the function-based organisational structure, it should be pointed out that such a structure often results in fragmentation, given that in order to prevent fragmentation and achieve the desired level of cooperation and collaboration between organisational units, companies must complement their function-based organisational structures, and sometimes this means creating process parts that combine strategically important activities that were previously performed in separate functional units. Moreover, this is supported by the fact that 52.9% of the examinees believe that the organisational structure is only partially adequate; indicating the importance of the structural components with regard to company's performance. The examinees also believe that the activities of the company are most significantly influenced by time dependence (34.7%), and the degree of activities that must be completed in order for another activity to begin, followed by the dependence on employee approach (28.6%), which precisely describes and focuses on our research problem: business processes.

The hypothesis testing was carried out on the basis of the selected characteristic parameters for groups of variables: business processes and organisational behaviour.

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Table1: Canonical analysis summary

		Canonical Analysis Summary Canonical R: ,99409 Chi2(121)=169,61 p= ,00241	
		Left Set	*Right Set*
No. of variables		*11*	*11*
Variance extracted		*100,00%*	*100,00%*
Total redundancy		*66,4127%*	*52,5509%*
Variables:	*1*	*PP17_3*	*OP40_1*
	2	*PP18_1*	*OP40_2*
	3	*PP18_2*	*OP40_3*
	4	*PP18_3*	*OP41_4*
	5	*PP18_4*	*OP41_6*
	6	*PP18_5*	*OP42_4*
	7	*PP18_6*	*OP42_5*
	8	*PP18_7*	*OP43_1*
	9	*PP18_8*	*OP44_3*
	10	*PP18_9*	*OP45_1*
	11	*PP18_10*	*OP45_9*

The dependence testing showed a statistically significant coefficient for the basic sets of the selected variables (predictors - business processes and criterion - organisational behaviour) and a high canonical correlation coefficient (Rc = 0.99409) with the significance level of 99% (p < 0.01) and a 100% explained variance in both sets of variables: predictor and criterion. Furthermore, eigenvalues as the characteristic values of the matrix show that the strength of relationship between pairs of variates is extremely high (0.9) in the first three canonical factors. The canonical correlation coefficient indicates that 99.4% of the variance is shown between the first pair of canonical factors, the coefficient of determination (R^2) shows that the variance of the first group of the criterion variables can be explained by the predictor variables with approximately 98.82%, the remaining 1.18% in the common variability explanation can be attributed to other characteristics which are not considered in this study. Lambda Prime, a test of the significance of the correlation coefficients, which confirms the significance of certain canonical factors in the variables tested, is very high (Lambda Prime = 0.00001) in the first pair of the canonical factors with a 99% level of statistical significance.

The highest correlation of the correlation coefficients of the predictor variables (r=0.95) is shown by the variables *support business processes are defined in the company (PP18_5)* and *management business processes are defined in the company (PP18_3)*. And the other significant correlation is shown by the variables that *key processes* (PP18_4) and *supporting business processes* (PP18_5) (r=0.90) are defined in the company. The highest correlation of predictor and criterion variables (r=0.757167) show variables *business processes ensure job satisfaction* (OP41_6) and *support business processes are defined in the company* (PP18_5). The canonical weights of business processes in a positive sense (2.94) show that the unique contribution of the variable *support business processes are defined in the company (PP18_5)* is the most significant and reaches its maximum in the canonical factor 8 *(Root 8),* whereas the canonical weights of organisational behaviour show that, in a positive sense (1.03), the

most significant unique contribution is that of the variable *organisational objectives are achieved based on the lowest costs* (OP40_3), which reaches its maximum in the canonical factor 1 *(Root 1)*.

The factor structure of predictors (business processes) and criterion (organisational behaviour) reveals that the variable *support business processes are defined in the company (PP18_5)* has the most significant correlation (0.81) with third canonical variate (canonical factor). In this table, the factor structure of the criterion variable *employees look for opportunities for new work due to the organisational culture of companies (OP42_5)* (0.77) has the most significant relationship with the eighth canonical variate (canonical factor). Based on the values shown, we can conclude that the canonical correlation of the relationship of the group of selected variables of business processes and organisational behaviour is high (Rc=0.99409, R^2=0.988209, p <0.01) and we accept the hypothesis that well-defined business processes positively affect the desired organisational behaviour.

4   CONCLUSION

The paper points out the impact the defined organisational processes have on organisational behaviour. In other words, process orientation ensures the freedom of action of the people in the organisation by encouraging people to "own their work", to be team players and to motivate people to get involved in resolving problems, to provide voluntary assistance (organisational citizenship behaviour), and to reflect on their work and tasks, bring ideas, make decisions, suggest the right initiatives. Furthermore, it is important for companies that the structural dimension, with varying interpretations of individuals performing the processes, ensures equal organisational behaviour. However, the new process approach to business has not yet been fully understood. Although the companies defined their core business processes, the combination of integrated processes and fragmented organisations created a form of cognitive dissonance, with horizontal processes pulling people in one direction and traditional vertical management systems pulling them in another. Thus, our research findings indicate that business processes are still an insufficiently understood concept, that the creation of self-managed work teams, which require extra effort, special training and education, has been neglected. Although the most significant feature of teamwork is that of providing support to business processes (M=5.71, SD=1.13), teamwork indeed has a direct impact on work productivity and job satisfaction that represent the essential elements of organisational behaviour, however, the other elements belong to the domain of the *neutral action areas*: organisational citizenship behaviour, absenteeism, fluctuation and deviant behaviour in the workplace. Therefore, the practice of business processes possibly influencing other variables of organisational behaviour should be adopted in the future.

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HEALTH AS A PART OF HUMAN CAPITAL

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ABSTRACT
Human capital consists of healthy, well educated, skillful, innovative and creative people who contribute to creation of new values. Therefore human capital incorporates the health-related aspects of a person per definition. Health has a direct impact on human capital, but also it has interaction with education. Although the influence of health and education on effectiveness and economic growth is hard to separate, most of the authors when making analyses, take into account only the influence of the human capital in the whole. In this paper, we will analyze thoroughly mutual influences of health and education, and its influence on worker's productivity. Despite the fact that there is a great number of books, articles and researches, that deal with education as a component of human capital, small number of works analyze health as its second most important component. The main goal of this work is to show the importance of health as a component of human capital. Health presents the main individual and social value, and there is nothing above it. Health of a person reflects in biological, psychological and social sphere and its interaction. How much will human capital contribute to successful business of a company and also to the economic growth depends on all three health components. Population health dramatically improved in the last century. Therefore for example, indicator of life expectancy at birth in the USA increased from 42.5 in 1890 to 79.0, according to the latest data of World Health Organization. Mortality due to cardiovascular diseases also decreased. Alongside the improvement of health indicators, health expenditure increased measured with percentage of GDP and dollars per capita. In the final part of the work, on the example of selected European countries, we analyze relation between health indicators, life styles and health expenditure to amount of real GDP.

Keywords: Education, Health, Human capital

1 INTRODUCTION

Different historical periods, different socio-cultural environments and different scientific disciplines have formed numerous concepts to define health. The most frequently used definition of health is the one from the preamble to the World Health Organization Constitution of 1948, which says that health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Richards, 2003). In the first empirical paper in health economics, Fuchs V. states: "Good health is one of man's most precious assets." (Fuch, 1972, p. 3) Most of the scientific discussions within social sciences most often view health as a prerequisite of function. Thus, social sciences deal with the functional-structural dimension of health, or rather its role as a prerequisite for achieving an individual's social status. Philosophical considerations, on the other hand, view health as one of the prerequisites to achieve a happy, hedonistic life, or a life in which the soul is in harmony with itself; however, here health is not viewed as an ultimate goal. The concept of health is probably most difficult to incorporate into economic sciences. Specifically, one could say that for economic sciences health is a matter of choice at individual level and at community level. This choice includes the ways in which limited resources are allocated between investments in the health sector and other sectors and between different alternatives within the health sector. This concept, or rather the study of health economics, is based on a definition of economics which, as is well known, is a social science that deals with defining

ways in which limited resources are allocated to meet potentially limitless needs (Vilogorac, 2001, p. 9). The next concept that can serve to analyze health is the concept that treats health as a public good. Specifically, considering the fact that health care occupies a very important place in public policy creation and also considering the fact that, regardless of the health care system in place, there is no state without some form of national health insurance, we can conclude that today the issue of individual health may be treated as a public good. This is particularly evident in public health care, which has to deal with the issue of externalities. Health, or rather health services, is also an important export product. It is estimated today that annual earnings in health tourism are about 60 billion dollars, while realistic projections indicate this figure will grow in the coming years to 100 billion dollars (Barić, 2011, p 13). However, when discussing health as an export product, it is important to note that this concept does not include only the notion of health tourism that encompasses professional and controlled use of healing sea, spa and air capacities. Specifically, in the last few years, clinics around the world have been offering standard health services at secondary and tertiary levels to patients coming from abroad. The last, but not least important concept that treats health is the analysis of health as one of the principal components of human capital.

2 HEALTH AS CAPITAL

The economic theory understands capital to be factors that have the following three qualities:(i) durability, (ii) transferability and (iii) the existence of a trade-off. Health may be viewed as a durable good because healthy organs remain healthy for an extended period of time and lead to extended lifespans. Return on health is transferable in the sense that better health makes it possible to earn better wages in the market. Investing in health entails different forms of sacrifice, such as: changes in diet, spending time and money to treat diseases, etc., and we can therefore conclude that health has the three qualities required to treat is as capital (Fimpel, 2007, p. 8). The concept of "investing in people" was introduced in the economic theory in the late 1950s, and the first discussion in which health is treated as capital is found in an article published in The Journal of Political Economy in 1962, in which S.J. Mushkin views health as an important investment. In the paper, Mushkin analyzes similarities and differences between education and health care. Both education and health care increase "productivity" of an individual, with the individual being viewed as a consumer as well as a producer. Both education and health are in part consumable goods and in part investments, and both are treated as implicit components of the standard of living, or in Mushkin's words: "when a man does not have sufficient vitality to function normally, consumption of other goods loses in importance, and without education the distinctive quality of the human being is lost" (Mushkin, 1962; referenced by Fimpel, 2007, p. 7). Apart from these similarities between health and education, there are also some differences: (i) while investments in education increase the quality of workforce, investments in health increase the number of able-bodied persons and individuals' capacity for work; (ii) while health care programs seek to prevent diseases that occur due to a "hostile" environment, education seeks to detect and encourage natural talents that are developing in this environment; (iii) while in education there are two alternatives - to invest or not to invest, in health the issue is to make a choice between investing and submitting to the effects of the Darwin's law according to which the fittest survive, which is not an acceptable option in the modern society. A specific feature of health and education is that both are, on the one hand, the result of production processes and, on the other hand, they represent an input in the production process.In the context of what was said previously, it is important to stress that health represents one of the principal determinants of human capital.

3   HEALTH AS A PART OF HUMAN CAPITAL

The concept of human capital was developed in the early 1960s when the US economist and Nobel laureate Theodore W. Schultz analyzed the cost of education as an educational investment (Bogdanović, 2008, p. 46). In addition to health and education, later on human capital came to include all human qualities that an individual's and organization's labor efficiency depend on, including: physical health, physical and mental abilities, motivation for work and development, and skills and competencies. Although there are many different views regarding the definition and content of human capital, human capital in general has at least two principal components: (i) collective human capital, and (ii) individual human capital. The principal elements of collective human capital are the national culture and social institutions, organizational climate and culture of each legal entity, and social (team) harmony/cohesion. On the other hand, individual capital includes: intellectual, health, emotional, moral, social, aesthetic and altruistic capital (Bogdanović, 2008, pp. 51–54). Accordingly, by its very definition, human capital also includes the health of employees. Because the impact of health and education on efficiency and economic growth is difficult to isolate, most of the authors in their analyses take into account only the impact of human capital as a whole. However, between education, health and productivity, there are many interdependencies that need to be analyzed.

The relationship between health and education is an interdisciplinary question that is treated as part of the study of public health, sociology, health economics, etc., with each discipline treating this correlation in a different way. Within human capital, education can have an impact on health in two ways: it may increase the efficiency of individual production of health or it may lead to a more health-oriented production (Albert and Davia, 2010, p. 163). In addition, an improvement in productive efficiency from investments in education increases the return on life-saving investments in health (Todaro and Stephen, 2006, p. 349). Education also plays a very important role in preventive action because an increase in the level of education results in not only medical staff but also patients having more knowledge about methods for preventing disease. Sala-i-Martin, for instance, states that children of better educated mothers in developing countries are significantly more likely to survive than children of mothers who are illiterate (Sala-i-Martin, 2006, p. 97). Higher education increases the rate of return on health, because longer life expectancy means an increase in income generated during one's lifetime, while an early death would, for each individual and for society, make investment in education less cost-effective. The most recent research framework pays special attention to employment as an important transmission mechanism: educated persons are more likely to find a job, which has better effects on health than unemployment (Albert and Davia, 2010, p. 165). On the other hand, health also has a major impact on education. Increased health care capacities can increase return on investments in education because health is an important factor of school attendance. Among the ways health has an impact on education, Todaro and Stephen note that healthier children perform better at school. (Todaro and Stephen, 2006, p. 350). The next way health has an impact on education concerns the incentive to invest in education. Specifically, the expected return on education is higher among persons who are healthy and are less likely to fall ill, and companies are motivated to invest more in employee education. The sameapplies to an individual. In case of a short life expectancy, the discounted present value of income from an individual's life is lower, and therefore the usefulness of education and training is relatively low, and individuals are not motivated to invest in education. If the rate of child mortality is high, parents face a sort of a trade-off, known in theory as the Beckerian qualitative-quantitative trade-off associated with children, where parents choose quantity sacrificing the quality of their

children's life. In addition to these interactions between health and education, it is important to note that both health and education affect productivity and, ultimately, the overall economic development of a country. Sala-i-Martin states that poor health is the cause and consequence of poverty. He calls this phenomenon the "poverty trap". Specifically, unhealthy persons have less productive bodies in terms of strength and height, and on the other hand such persons cannot concentrate properly and therefore have smaller brain capacity (Sala-i-Martin, 2006, p. 100). It is possible to find numerous examples in support of the argument that health increases worker productivity. For example, the British entrepreneur and social reformer Robert Owen (1771–1858) introduced new rules and mechanisms to increase worker productivity in his cotton factory in New Lanark, Scotland. Owen was a member of a Board of Health which dealt with improving health and treating people living in industrialized cities, and he was trying to implement the Board's conclusions in his own factory. To increase productivity, he introduced strict hygiene standards and taught workers and their children the importance of cleanliness. Owen established a hygiene inspection team, the "bug hunters," who made regular visits to workers' homes. In addition, the workers in his factory worked fewer hours per day than those in other cotton factories. As a result of these activities, Owen cited an increase in productivity and profits (Fimpel, 2007, p. 14). Papers published by Schultz in 1999 and 2000 and papers published by Bloom three years later also showed that, at macro level, there is a positive correlation between health and productivity of workers (Chawla, 2007). On the other hand, education also has an impact on productivity. Specifically, less educated persons are less responsible and less independent, cannot perform demanding jobs and are therefore less productive. They are often less mobile and flexible in terms of dealing with new challenges. The last interdependence we will be dealing with here is the dependence of health and education on productivity. Specifically, higher productivity leads to higher and more efficient production, which in turn gives the worker more time that he or she can invest in health and education. In addition, higher labor efficiency also means that the education and health sectors work more efficiently, and based on this the level of education and health of the population will ultimately be at a higher level.

4   CORRELATION BETWEEN HEALTH INDICATORS, LIFE STYLES AND HEALTH EXPENDITURE AND THE AMOUNT OF GDP

How much the health of population will contribute to improved performance of companies and ultimately economic development depends on the development of all three principal components of health - biological, psychological and social - and their interaction. Here we do not think only of the health care industry that aims to prevent health conditions (although it is important), but also of prevention and a healthy life style that will result in a healthier and, by consequence, more productive population.

Numerous studies conducted over the past twenty-odd years have shown that between health and economic growth and development there is mutual causality. In 1996, Barro conducted a study to isolate the most important factors that determine economic growth in a country. Overall health status of the population as measured by the logarithm of life expectancy at birth (LEB) showed a significant positive effect on growth. The coefficient he obtained, all other things being equal, implies that an increase in life expectancy by forty percent (from 50 to 70 years of age) results in an increase in the growth rate by 1.4% per annum. A similar result is obtained if we take as the indicators of health of the population child mortality rate, adult mortality rate or life expectancy at age 5. It is very important to note here that health also shows a significant impact on economic growth if we include the impact of education and GDP into the regression (Barro, 1996, p. 14).

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A study by Barghava 2001 showed a positive impact of health on economic growth in developing countries, while the impact in developed countries was negative. On the otherhand,in countrieswithhigh standards in health care andeducation, investments in health are not less important because the longer life expectancy increases the incentive to invest in human capital and individuals replace today's consumption with investments in health and education because this will ultimately lead to higher returns and higher future consumption (Fimpel, 2007, p. 17).

Doppelhofer, Miller and Sala-i-Martin (2004) included in their regression analysis more than twenty factors that may have an impact on economic growth. Their analysis has shown that health is the most important component of human capital in terms of impact on economic growth. They took as health indicators life expectancy at birth, malaria prevalence and the share of tropical regions in the total area of the country (Doppelhofer, Miller and Sala-i-Martin, 2004, p. 826).

Several studies conducted in different periods have shown that there is a measurable, positive and significant correlation between life expectancy and economic growth. For instance, the indicator of life expectancy at birth in the US increased from 42.5 years of age estimated in 1890 to 79 years of age as indicated bythe most recent data of the World Health Organization. Weil (2005) used data on average age, height and average life expectancy of males to study the impact of health on economic growth and he found that there was an impact of health on economic growth, but this impact was significantly lower than in other estimates. In addition to this obvious relationship, a World Bank study also showed a strong correlation between aggregate indicators of population health and the amount of per-capita income. As an example of this correlation, we can take the number of child deaths before age five. Overall, in 2002 there were 120 deaths per 1000 children in low-income countries, 37 deaths in middle-income countries, while in high-income countries there were 7 deaths per 1000 children. In addition to increasing workers' productivity, population health has an impact on economic development through an increase in the number of able-bodied population and through a reduction in direct and indirect costs of treatment. It is also possible to measure economic effects of different diseases. For instance, McDonald and Roberts concluded that a 1% increase in HIV prevalence in Africa results in a 1% reduction in per capita income (McDonald and Roberts, 2006, p. 241).

4.1 Analysis of the impact of indicators of population health, life styles and health expenditure on the level of GDP in selected European countries

As shown previously in this paper, the impact of health as a principal component of human capital on the level GDP can be measured in a number of ways. In this section of the paper we will show the impact of the level of health expenditure and the indicators of population health (we will use data on on life expectancy and mortality from cardiovascular disease) and life styles (alcohol consumption) on the level of GDP in European countries. For ease of analysis, we have divided the European countries into four groups. The first two groups are the EU15 countries (France, Germany, Italy, Belgium, the Netherlands, Luxembourg, United Kingdom, Denmark, Ireland, Greece, Spain, Portugal, Finland, Austria and Sweden) and EU12 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Malta, Cyprus, Romania and Bulgaria), while the third group includes Croatia, Montenegro, Iceland, Turkey and Serbia, which are called EU candidate countries in this paper. Because Bosnia and Herzegovina does not have the status of a candidate country, we have included Serbia in the

analysis, which is also a potential candidate for EU membership. Health care expenditure trends have been analyzed for the three groups of countries and for Bosnia and Herzegovina.

Chart 1 shows the trend of GDP per capita expressed in PPP$. As expected, the EU15 countries have the highest values of real GDP per capita, followed by new member states and finally candidate countries. Bosnia and Herzegovina has the lowest value of GDP. These differences among the groups of countries are more or less the same over the years.
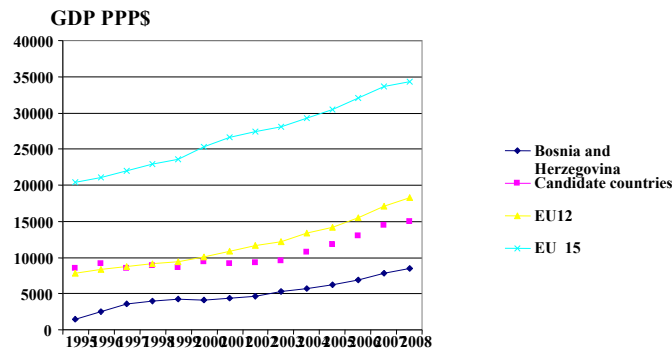
Chart 1: GDP per capita PPP$, groups of countries

One of the indicators of population health is life expectancy at age 65. As shown in Chart 2, the highest values for this indicator were recorded in the oldest EU member states and the lowest in the new EU member states. Improved health of the population is also indicated by a reduction in mortality rates from cardiovascular disease. Chart 3 presents mortality from cardiovascular disease. This chart shows that the highest number of deaths from cardiovascular disease per 100,000 population is in the new EU member states and the lowest number is in the old EU member states. The mortality rates decrease in all four groups, while the differences remain more or less stable.
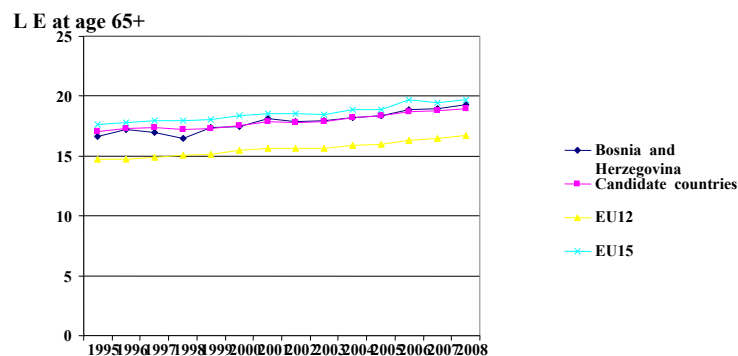
Chart 2: Life expectancy at age 65, groups of countries

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CV DISEASE
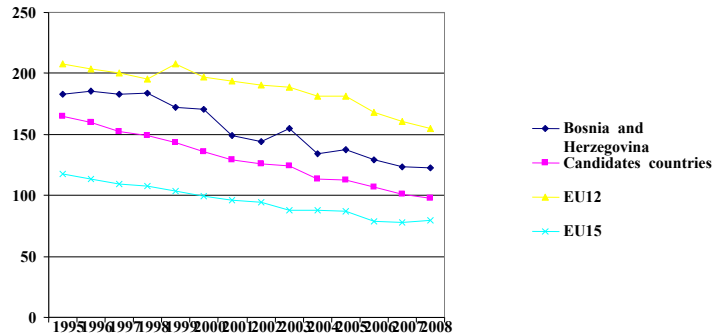
Chart 3: Mortality from cardiovascular disease

Another factor that affects health characteristics of a population, affecting thereby economic development, is life style. We can see in Chart 4 that the highest alcohol consumption for all years is in the EU15 countries, and the lowest in EU candidate countries. However, at the end of the defined period, these differences disappear.
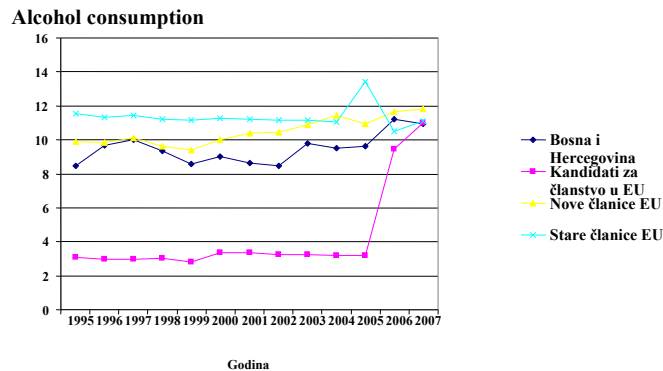
Chart 4: Alcohol consumption in liters

Health expenditure rises along with the improvement of population health. Chart 5 shows the trend of health expenditure per capita in selected countries. Of all the listed countries, health expenditure per capita is highest in the EU15 countries. After showing trends in the observed variables, we will now show the correlation between these variables and the level of GDP per capita. Chart 6 displays a positive correlation between life expectancy at age 65 and the level of GDP per capita. On the other hand, in Chart 7 we can see a negative correlation between mortality rates from cardiovascular disease and the GDP per capita. If we look at the variable of alcohol consumption per capita, we can conclude that there is no unambiguous trend of correlation between this variable and the level of GDP (see Chart 8). On the other hand, we can notice a positive correlation between the level of health expenditure per capita and the level of GDP per capita (Chart 9).

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Health expenditure per capita
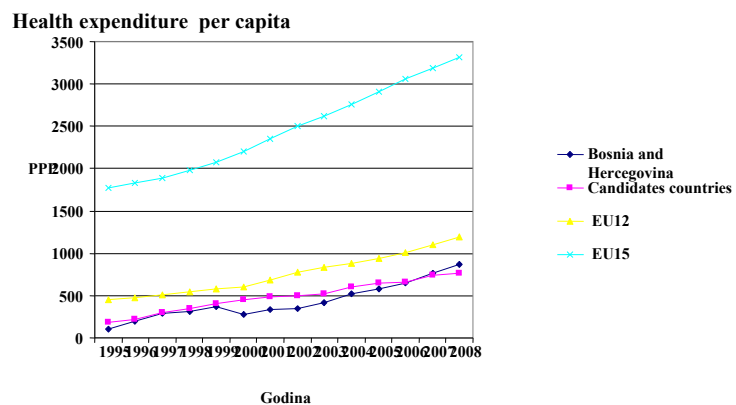
Chart 5: Trend of health expenditure per capita
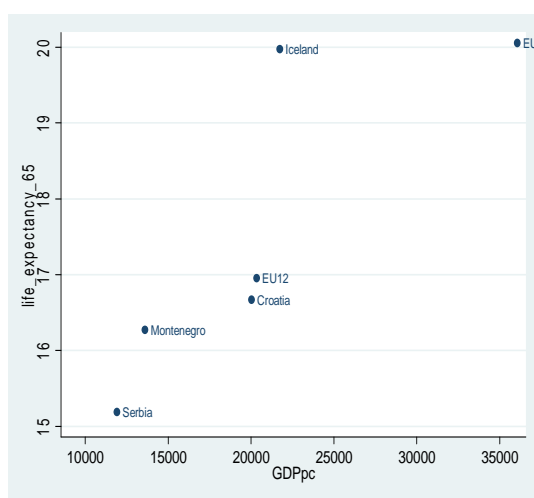
Chart 6: Correlation between life expectancy at age 65 in years and GDP p.c.

Chart 7: Correlation between mortality from cardiovascular disease and GDP p.c
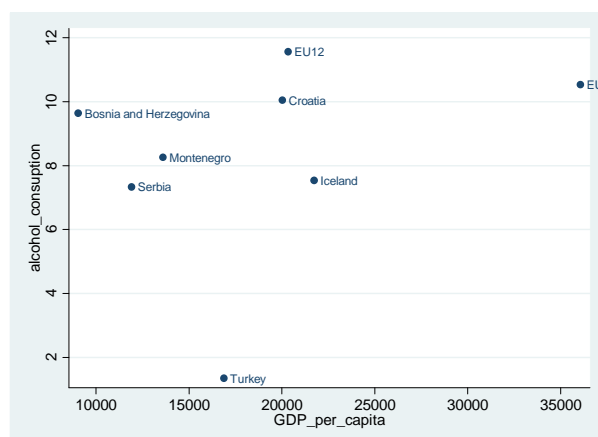
Chart 8: Correlation between alcohol consumption and GDP
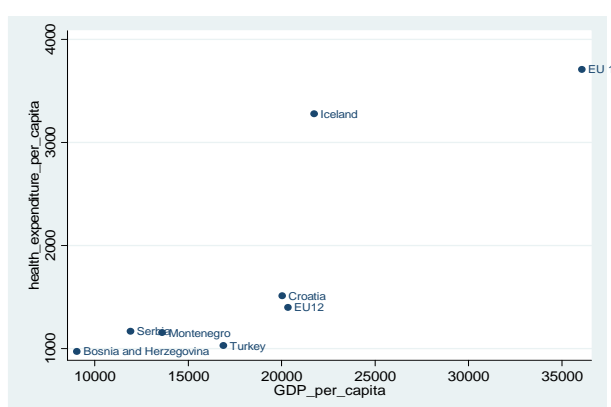
Chart 9: Correlation between health expenditure per capita and GDP per capita

5 CONCLUSION

Health can be defined in various ways within economic sciences. In addition to being treated as a public good and being held as one of man's most precious assets, investment in health also has all the qualities necessary to treat it as capital. In this respect, it is important to note that, along with education, health is considered a vital component of human capital, with a series of similarities and differences as well as interdependencies between education and health. Numerous studies conducted over the past twenty-odd years have shown that between health and economic growth and development there is mutual causality. Having reviewed some previous studies in this paper, we have used as an example selected European countries to show trends in the growth of GDP per capita and selected variables associated with population health, life styles and amounts of health expenditure per capita. As expected, we have concluded that the highest GDP per capita was in the old EU member states. Population health improved in parallel with GDP growth, such that there was an increase in life expectancy at age 65 and a reduction in the number of deaths from cardiovascular disease. Improvement in health indicators is accompanied by a growth in health expenditure. After analyzing trends in these variables, in this paper we also analyzed the correlation between the variables and the level of GDP. With respect to life style and its impact on the level of GDP, by using alcohol consumption as a variable we have not managed to show a clear correlation between these two. On the other hand, we have proved the existence of a positive correlation between life expectancy at age 65 and GDP per capita, and between health expenditure per

capita and GDP per capita. In this paper we have also shown that a reduction in the number of deaths from cardiovascular disease is correlated with the growth of GDP per capita, whereby we have confirmed that improvement of health, as an important component of human capital, leads to an increase in GDP per capita.

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MARKETING STRATEGIES FOR THE NEEDS OF ACCESSION TO THE EUROPEAN UNION: THE CASE OF CROATIAN ICT DISTRIBUTORS

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ABSTRACT
This paper focuses on the adjustment of marketing strategies of Croatian ICT (Information and Communication Technologies) distributors in the process of accession to the European Union. This process has brought about doubts and fear of the unknown. Moreover, the attitudes and opinions in the society are greatly polarised. This paper researches the impact of the deregulation process and the simplification of business processes of foreign ICT distribution companies in the Republic of Croatia. National ICT distributors have planned marketing strategies, which need to be implemented due to the forthcoming changes and with the aim of increasing or maintaining their competitive position. Every company must find its own path in the newly formed circumstances, recognise advantages and emphasize them. The correct perception of the complexity of marketing, the comprehension of the marketing mix elements and their interrelationship can help increase competitiveness of national ICT distributors. This paper also comprises a short overview of the theoretical framework of marketing strategies and puts the topic in context. For the purpose of this paper an online survey is carried out and a questionnaire is sent to 230 electronic addresses. The segment of the observed sector comprises 521 companies (according to International Data Corporation, market research and analysis firm specialized in information technology, telecommunications and consumer technology), and 51 companies take part in the survey, which accounts for 9.79% of the overall target segment of the sector. It should be noted that the total of 521 companies includes foreign companies as well, i.e. companies with capital of foreign origin but they have not been included in the final sample of 51 companies. Research and analysis of data obtained through the survey point towards certain conclusions about business practices of ICT distribution companies, the problems they encounter, their strengths, advantages and ways of adjusting the marketing mix elements as the main guidelines of the adjusted marketing strategies. It is believed that the market and distribution channels are threatened by the increase of foreign competition and market deregulation in the Republic of Croatia.

Keywords: Distributive retail, European Union, ICT, Marketing strategy

1 INTRODUCTION

The process of accession to the European Union has brought about doubts and fear of the unknown while the attitudes as well as the relationships are greatly polarized. The aim of this paper is to research the impact of the deregulation process and the simplification of doing

business of foreign ICT distribution companies in the Republic of Croatia. As a consequence of deregulation and the opening of the market a large number of foreign companies will set up their operations in Croatia. Market expansion and competition will have beneficial effects for the consumers. A large number of companies in the classical retail business, i.e. businesses that add the smallest value to the product will find themselves in the most difficult position. The main problem is whether these companies will manage to stay competitive on the open European market and to what extent they will have to adapt their marketing strategies.

Croatian national ICT distributers possess certain advantages and strengths such as distribution skills, marketing and managerial knowledge of large domestic distributors (IDC, 2011). A large advantage is the knowledge of local and regional markets, customs, threats and specifics of distribution channels. The new act on the obligatory payment within 60 days (NN 125/11) should make doing business in Croatia easier for all companies. There are certain doubts about the implementation of the law, which is a general issue when it comes to the Croatian legislation. The general impression is that there is a somewhat weaker negotiating position in relation to foreign distributors caused by a relatively small size of most local distributors and the market itself. In the past years a trend of mergers and takeovers has been noticed but there has been a large number of companies prepared to be taken over due to unfavourable market conditions. Croatia, despite its excellent geographical position, has not managed to attract a larger number of foreign companies as a foothold for further expansion. A justifiable argument could be that Croatia is a relatively small market and as such is not particularly interesting, however a common market tends to merge spontaneously and it is inevitable that the European Union market will assimilate the Croatian market.

2   DEVELOPING MARKETING STRATEGIES

Marketing strategies are defined as long-term sales and profit goals and the marketing mix strategy over time (Kotler and Keller, 2008).

Out of the five competitive concepts of marketing management, nowadays less used are the concepts of production, product and sales and more attention is devoted to the integrated marketing concept and the concept of holistic marketing. This conceptual evolution is the consequence of hyper-production and hyper-competition where the main need for the product can be satisfied quickly and from many sources.

Marketing strategy is an opportunity for all stakeholders to realize long-term marketing goals on the target market as well as opportunities for their realization with the provision of necessary recourses (Allenby, 2006). The formula "segmentation, targeting, positioning (STP)" is the essence of strategic marketing (Kotler, 2008). Segmentation is important in order to determine the targeted market segment and to adjust the elements of the marketing mix depending on preferences. Based on the customer preferences and the adjustments of the marketing mix, the product is positioned to satisfy the perception of the segmented consumer. Segmentation is an extremely important step in the optimal allocation of resources to the target consumers in order to achieve good product positioning and choice. Positioning is done based on competitive advantages important to the segmented market and it can be achieved by the company (Previšić, 2004). After determining the value, the organizations are ready to deliver it to the market by determining specific product characteristics, price and distribution. The message about value is sent through promotion, i.e. communication mix and thus positioning the product as it is shown in Figure 1.

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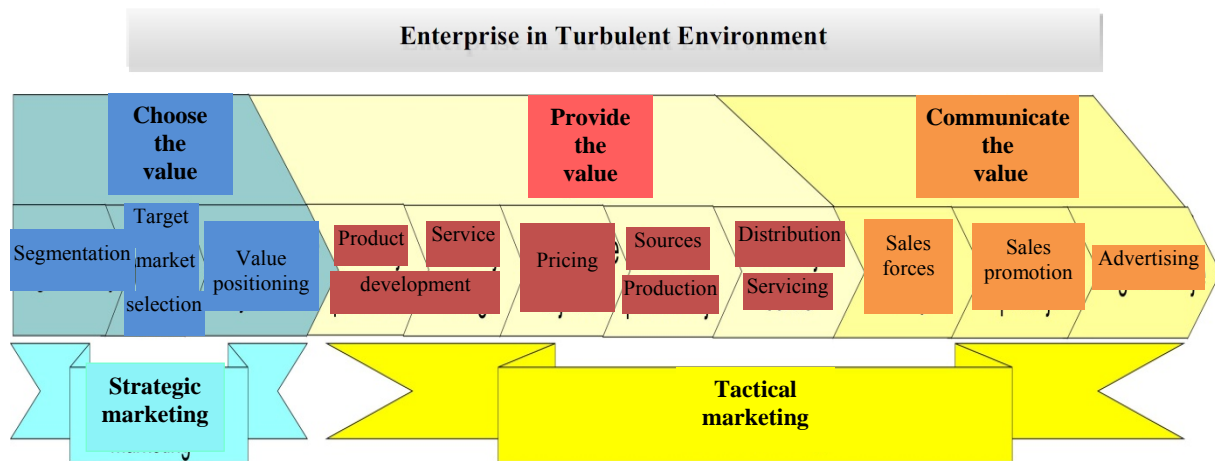
Figure 1: Value creation and delivery sequence (Kotler and Keller, 2008, p. 36)

For instance, when introducing new products marketing strategies are developed in three parts. The first part describes the size, structure and behaviour of the target market, positioning and the desired goals regarding sales, market share and profit over the course of the first few years. The second part of the plan drafts the planned price, distribution strategy and marketing budget for the first year. The third part of the plan deals with long-term sales and profit goals and the marketing mix strategy over a period of time. The marketing strategy, or its adjustment to the changeable market conditions, is of the key importance for the existing products, their survival on the market and their development.

3 DESCRIPTION, OVERVIEW AND INTERPRETATION OF RESEARCH RESULTS

3.1 Description of the conducted research
Research of marketing strategies of Croatian ICT distributers in accession process to the EU has been carried out in the experimental part of this work.

A survey method of research for collecting the necessary data was chosen after setting the objectives and hypotheses of research.

The survey was carried out in June 2012. A questionnaire was sent by email to 230 email addresses from a server on which the survey was posted. The observed sector segment comprised 521 subjects (IDC, 2011) while 51 responded to the questionnaire, which accounts for 9.79% of the total targeted sector segment. It is important to point out that the total number of 521 subjects included foreign companies, i.e. foreign capital as well. After checking 51 surveyed companies in the *poslovna.hr* database it was established that all of them were of domestic ownership and capital. The research results have shown several interesting cognitions while the surveyed companies are all established businesses, 58.8% of which have been in business between 11 and 20 years. The research has shown that the largest number of companies, 49% of them, employ up to 5 people, and the companies that have been present on the market from 11 to 20 years employ the largest number of people.

3.2 Overview and interpretation of research results
Companies participating in the survey had five possible answers to the question how familiar and well informed they are about the alignment of the Croatian legislation with the legislation of the EU. As can be seen in the graph in Chart 1, ten companies responded that they have not focused on the change in the legal environment and they are not familiar with it, which

accounts for 19.6% of the surveyed companies. Only two companies are regularly and informed in detail, which is an extremely small number regarding the possible impact. It can be concluded that the companies, according their own estimate, are not informed. 35% of the surveyed companies are informed occasionally and according to the need, which is the same number as the only superficially informed companies.

How well informed are you about the alignment of the Croatian legislation with the legislation of the EU?

- Will find out on time 6%
- Informed in detail and on regular basis 4%
- Not informed 20%
- Informed occasionally (according to the need) 35%
- Only superficially informed 35%
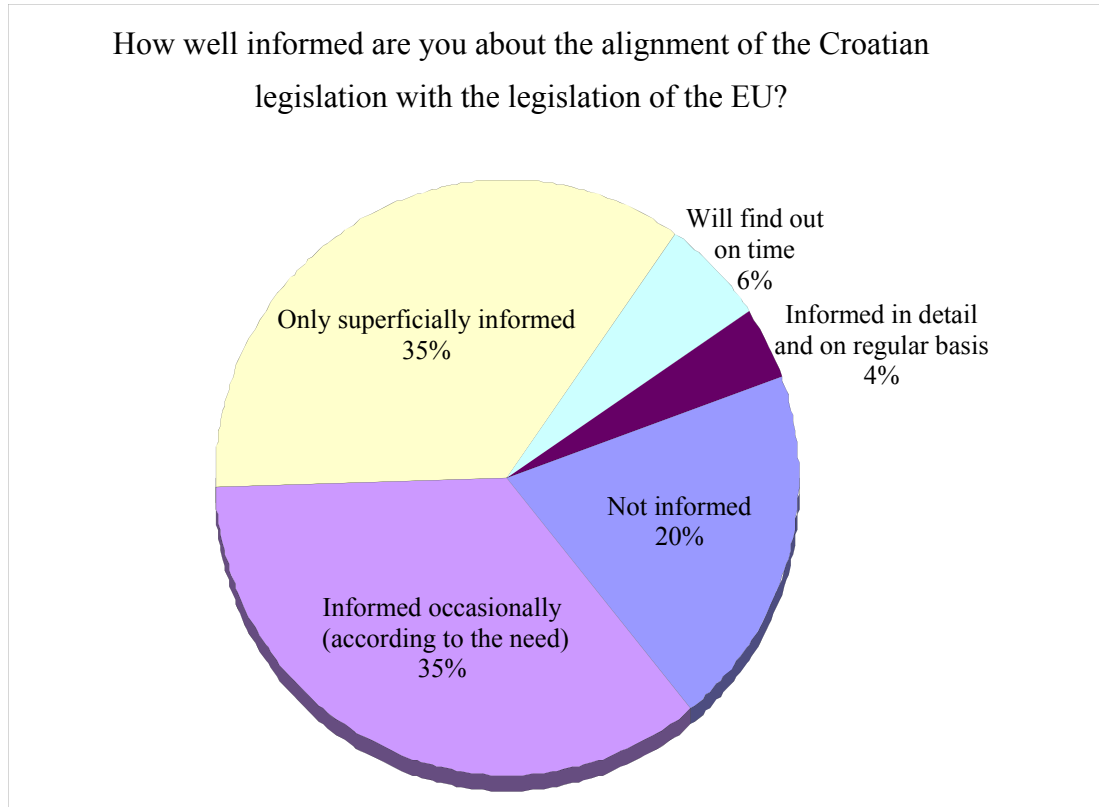
Chart 1: Knowledge of legislation alignment process

Taking the future and the necessary investments into consideration in order to retain or increase their competitiveness in the EU, domestic ICT distributors will have to invest in all the elements of the marketing mix (Chart 2). The companies plan to make the largest investments in products, i.e. services in order to stay competitive. 39.2% of companies plan an aggressive promotion approach, 37.3% believe they will have to invest in price competitiveness. Investments in distributive channels are planned by 23.5% of the surveyed companies.

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In order to increase or retain competitiveness in the EU
your company will invest most in…
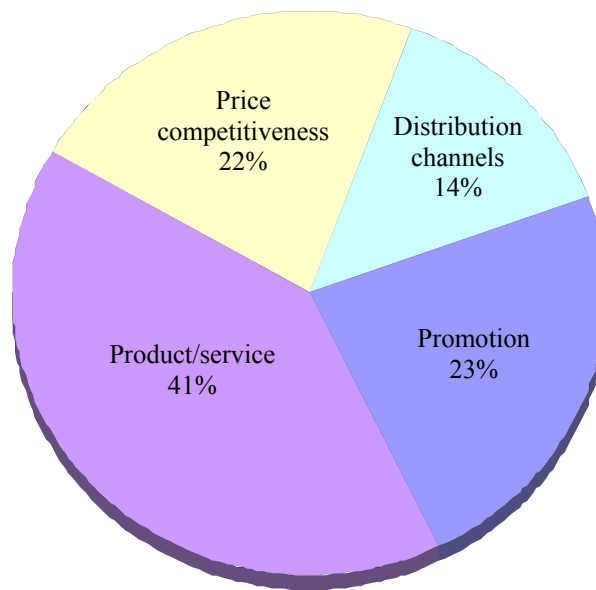
Chart 2: Marketing mix investment plan

According to the core activity retailing, provision of services and wholesaling consider investing in products/services to be the priority (Chart 3). Companies with distribution as their core activity believe that the priority investments are in distribution channels, which means investing in retaining present customers but opening new channels as well. Retail companies that focus on the end user consider investing in promotional activities a bigger priority than investing in price competitiveness. The smallest number, four companies, see investing in distribution channels as a priority in order to retain competitive position.

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Activity	Distribution	Retail	Provision of services	Wholesale
■ Promotion	0	13	5	2
■ Product/service	2	17	11	5
□ Price competitiveness	2	10	5	2
■ Distribution channels	3	4	2	3
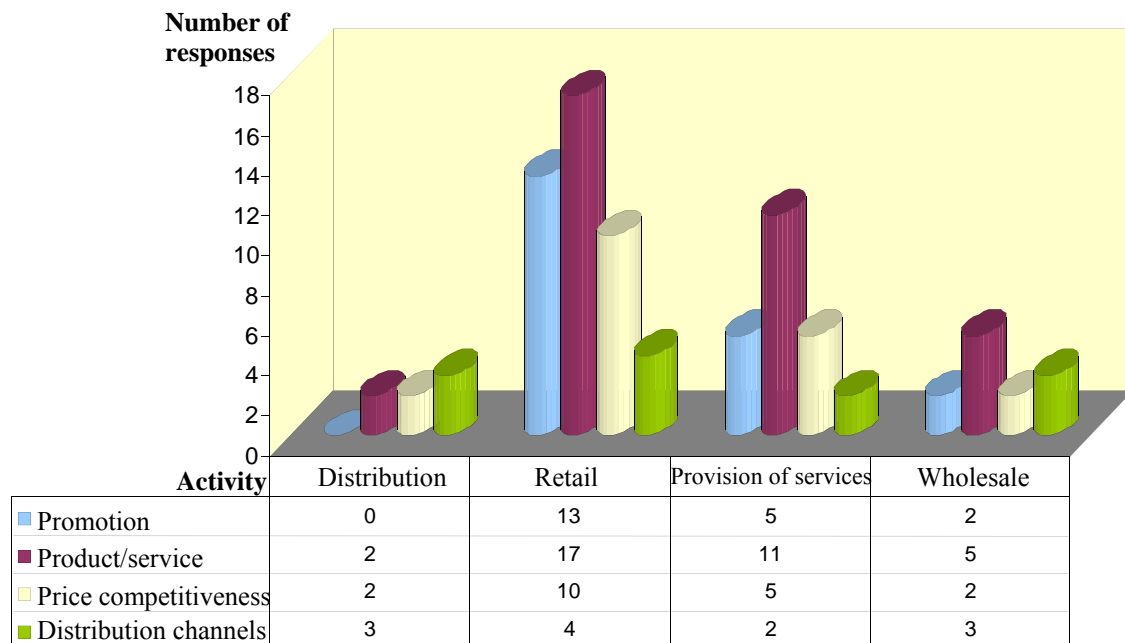
Chart 3: Future investment plan according to the core activity

According to distribution channels the companies believe they will mostly need to invest in product/service (Chart 4). The exception are companies whose primary channels are large retail chains. Such companies believe that investing in price competitiveness is their priority. Companies whose primary distribution channels are specialized chains will be equally investing in product/service, promotional activities and their distribution channels and somewhat less in price competitiveness.

Distribution channel	B2B	e-retail	Own retail	Less specialized channels	Specialized channels	Large retail
Distribution channels	7	7	7	8	4	4
Price competitiveness	3	9	15	8	3	5
Product/service	9	14	27	11	4	4
Promotion	4	7	18	9	4	4
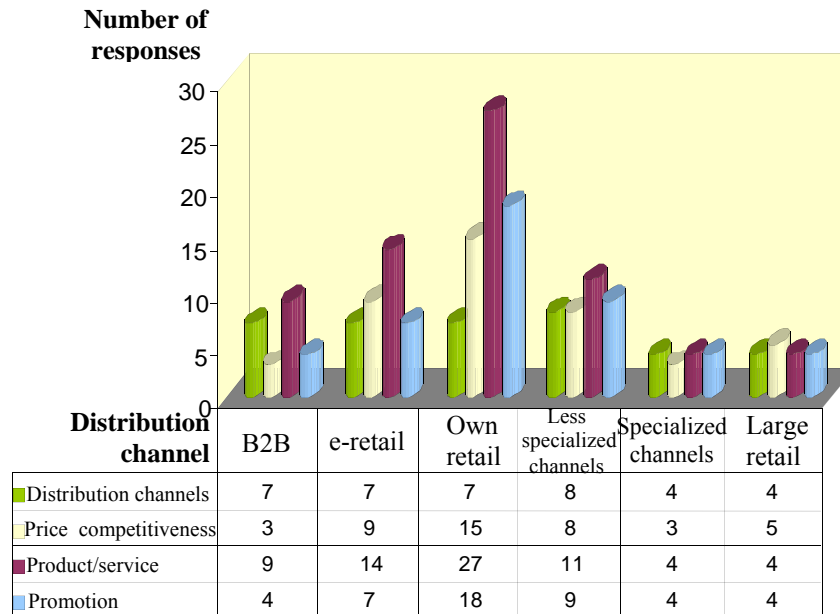
Chart 4: Future investment plan according to distribution channels

Previously stated is clearly shown in Chart 4, according to the distribution channels.

4 CONCLUSION

Croatian ICT distributors are faced with the environment marked by a high degree of dynamics and instabilities as the consequence of various external conditions of doing business and over which the companies have practically no influence. Therefore, it is necessary for the companies to adjust to these changes and market turbulences with the aim of not only surviving but ensuring a successful future development as well.

Through the research and analysis of data obtained from the survey certain conclusions can be drawn about the ways ICT distribution companies do business, the problems they encounter, their strengths, advantages etc. The surveyed companies think that the market and distributive channels are threatened by the growing foreign competition and deregulation on the Croatian market.

In the accession process to the EU and the growing competition, the price competition is increasing and consequently, the need to invest in promotion is perceived as a necessity.

The companies are aware of the situation that the prices and profit margins are being brought down while at the same time there is a growing need to invest in promotion and all the elements of the communication mix and therefore, the need of redefining marketing strategies.

Marketing strategies and the relations between the basic elements of the marketing mix in the analysed process and the present position of the Croatian national ICT distributors form the

basis for staying competitive and their survival on the market. Only a proactive holistic approach to marketing and the elements of the mix can ensure competitiveness. There isn't a unique solution and every company has to find their own approach in the newly formed circumstances – recognize the advantages and strengths and put them to good use.

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THE EFFECTIVENESS OF THAILAND'S SEVEN GREENS INITIATIVE ON TOURISM: A CASE STUDY OF NAN PROVINCE

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ABSTRACT

This research examines tourism in Nan Province of Thailand under the framework of the Seven Greens initiative launched by Tourism Authority of Thailand, of which the objectives are to prepare Nan as a tourist destination without adversely affecting the area. The aim of this research is to evaluate the effectiveness of this initiative and review the status of green tourism in Nan, a living ancient city rich in tourism resources, but not yet a well-known tourist destination. The hypotheses were that the government's program is not impactful enough in persuading tourism stakeholders to reduce their activities' impact on the environment and that there is a lack of awareness and knowledge among tourism providers and tourists. The research relied on data collected from published materials, publications of the Thai government, the site visit, surveys and interviews with relevant stakeholders. One main finding was that Nan has yet to reach its optimum sustainability level, based on the standards of the "Seven Greens" concept, which requires behavioral implications and operational participation. The results have shown involvement among tourism service providers, the local government and the local community to be inadequate and unbalanced. Moreover, the findings made an important contribution in four areas yet to reach the required level and needing to be improved, namely, infrastructure, legal framework, human resources, and people's contributive actions. It is evident that despite the people's awareness and determination, the message of the "Seven Greens" and the government's advisories were not conveyed as effectively and were not as impactful as could have been the case. Efforts to strengthen community and personal awareness and persuade more people to adopt these concepts are still needed to enhance sustainability and to set an excellent role model for other cities in the world.

Keywords: Ecotourism, Nan, Nan tourism, Seven Greens, Sustainable Tourism, Thailand Tourism, Tourism, Tourism development

1 INTRODUCTION

Modern tourism have traditionally aimed at meeting tourists' desires to experience different natural attractions, man-made attractions and cultural exploration. Such activities traditionally exert considerable pressure on the natural and cultural resources, which must therefore be maintained and protected against decay. While tourist activities have contributed to the urbanization of many natural areas and the development of many indigenous societies in the country, this has recently been seen as a threat since many of those natural areas are being harmed far beyond repair and the cultures are being altered if not already decayed. Thailand is considered among the world's top tourism destinations, due to the rich nature it has to offer to global tourists. The tourism industry in Thailand creates a major income resource for the nation and also attracts development in other fields such as transportation, trade, and other businesses. At the same time, the Thai public and the government have been increasingly aware in recent years of the adverse impact of tourism on their cultures and natural resources. Accordingly, many initiatives sponsored by the government and private advocates are currently active to support the enhancement and development of green tourism in Thailand. In

2008, the Tourism Authority of Thailand (TAT) launched the "Thai Tourism against Global Warming" Environment Conservation Declaration Project to alert the relevant parties more closely to environmental issues. Under the Environmental Conservation Declaration, the Seven Greens concept has been determined as a guideline for a conservation effort and greenhouse gas reduction for all relevant parties.

2 THE SEVEN GREENS INITIATIVE BY TOURISM AUTHORITY OF THAILAND

The Seven Greens initiative is an example of the efforts made by the Thai government to enhance sustainability in tourism and is described by the figure below:

Figure 1: Poster about the Seven Greens Initiative
(Tourism Authority of Thailand, 2011)[1]

The Seven Greens concept was developed around tourism elements in 2009 and has behavioral implications and an operational framework or guidelines towards environment preservation and greenhouse gas reduction for different parties in different sectors as follows:

1) Green Heart
Those involved in every sector of the tourism industry must have appropriate attitudes, feelings, thoughts, perception and awareness concerning the value of the environment. They should also act to preserve and restore the environment as well as reducing greenhouse gases with proper knowledge, understanding and methods.

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[1] English translation of the motto at the centre of the poster: "Enjoy Traveling, Care for the Environment".

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2) Green Logistics
The means of journeying and taking public transportation services for tourism from tourists' homes to tourist attractions must be either energy-saving or involve the usage of alternative energy to reduce greenhouse gases and preserve the environment.

3) Green Attractions/Destinations
Tourist attractions must be managed according to the sustainable development policy framework and implementation, and must have clearly committed to environmental preservation as well as reducing greenhouse gases with appropriate means.

4) Green Communities
Community tourist attractions must have integrated tourism management sustainably in both urban and rural areas. They must include implementation that focuses on environmental conservation, particularly the preservation of communities' unique culture and ways of life.

5) Green Activities
Tourism activities are in line and in harmony with the value of tourist destinations' resources and environment. They are entertaining or fun, while also giving tourists the opportunity to learn new experiences in a way that minimizes any adverse impact on natural resources and the environment.

6) Green Service
The servicing styles of tourism service providers impress tourists with consistent quality together with a determination to preserve the environment and reduce greenhouse gases in their services.

7) Green Plus
Individuals, groups and organizations agree to cooperate in contributing their physical energy, ideas, and funds to conserve and restore tourist attractions' environments, or in mitigating the threat of global warming.

According to TAT, the Seven Greens initiative call for the active participation and support of all tourism stakeholders in order to maintain the balance between tourism promotion and environmental protection to ensure long-term sustainability.

3   TOURISM IN NAN PROVINCE
Nan is one of the two pilot projects for the Seven Greens initiative, Samui Green Island Project and Nan Province Project. There is growing interest in Nan as it is regarded as an ancient but a living city (under its motto "Nan, Living Old Town") and is rich in natural and cultural resources. It is also considered a very safe tourist destination and is very well suited as a tourist destination for tourists from all places. Based on an interview with Nan Tourist Police in August 2012, the crime rate for tourists as of then stood at 0%.

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Figure 2: Nan Tourist Map (Tourism Authority of Thailand, 2011)

Nan covers an area of 11,472.072 square kilometres and is located 668 kilometres from the capital city of Bangkok. It is a town with an abundance and mixture of cultures from the high mountain ranges to the plain. It was as ancient as the Sukhothai Kingdom and was under the continuous ruling of 64 kings. The northern and eastern boundaries are shared with Lao People's Democratic Republic.

There are numerous tourist attractions in Nan, including temples, caves, national parks, mountains, villages, waterfalls, natural formations, fairs, festivals and the famous boat race. Despite its richness in tourism resources, the city is not yet a well-developed tourist destination. As a result, provincial authorities and its local people are working to ensure that appropriate measures and controls are put in place to protect the province from the negative effects caused by growing tourism activities. Despite these efforts, some are still unwilling to see more tourists in the city as they are concerned about these impacts and possible management failure by the local government.

A tourist survey conducted by Nan Statistics Bureau between December 2010 and September 2011 showed that 79.0% wanted to return to Nan the following year, 19.2% intended to return soon, and 1.8% said they would not return. The reasons were dissatisfaction with services such as restaurants and cafes that exploited the holiday season, while other negative factors included insufficient hotel services, hotel conditions that differed from those specified at the time of booking, and insufficient public toilets for ladies in the national parks.

Based on the survey, the number of tourists on a monthly average from December 2010 to September 2011 was 57,920, of which 99% were Thais and 1% was foreigners. The numbers each month have been fluctuating, partly due to political unrest throughout the year as well as a major flood in Nan in June 2011. Subsequently, the number of tourists rose again and is expected to peak every December, the holiday season. Regardless of the externalities, it can be observed that the number of tourists is generally low in non-winter seasons, which indicates that the city is reliant on seasonality and that tourism in this city has yet to reach its optimum sustainability.

Table 1: The number of tourists in Nan by month between December 2010 and September 2011 (Nan Statistics Bureau, 2011)

Month and Year	All Tourists Total	Thais	Foreigners
December 2010	143,618	142,187	1,431
January 2011	86,670	85,942	728
February 2011	56,116	55,361	755
March 2011	32,799	32,578	221
April 2011	71,986	71,645	341
May 2011	24,288	24,174	114
June 2011	13,653	13,516	137
July 2011	18,399	18,282	116
August 2011	35,328	34,619	708
September 2011	96,349	95,258	1,091
Total	**579,206**	**573,563**	**5,642**

4 THE EFFECTIVENESS OF THE SEVEN GREENS INITIATIVE IN NAN PROVINCE

In May 2011, the author conducted a survey in Nan, in which a total of 46 individuals and 31 tourism service providers participated.

20% of the individual respondents went to Nan because they saw the advertisement of TAT's Seven Greens. The remaining 80% had been recommended by their friends or received information about Nan from the newspaper or magazines. This figure indicates that few tourists have traveled to Nan under the influence of the Seven Greens project.

4.1 Marketing Effectiveness of the Seven Greens Initiative

When the individual respondents were asked if they had heard of the "Seven Greens" initiative, 52% answered "No", while 35% said "Yes". It is also interesting to note that although Nan is being promoted as a tourist destination under the Seven Greens concept, 90% of its local respondents had not heard of the initiative. This data suggests that the Seven Greens concept has not been effectively conveyed to tourists and the local community. Conversely, 52% of the tourism service providers had heard of it, which suggests that the marketing campaigns were more geared toward the service providers. When the respondents were asked if they were aware of the importance of protecting the environment while traveling in Nan more than 90% of both individuals and business respondents responded in the affirmative, which suggests high awareness among tourism stakeholders, regardless of the 7 Greens initiative. However, when the tourism service providers were asked whether they

were conducting their business according to the initiative or not, 57% said "Yes", 39% did not know, and 4% said "No". It implies that regular assessment measuring the effectiveness and feasibility of the launched initiative may not have been performed, since 39% of tourism providers were not aware of whether or not they were conducting their businesses in line with the scheme, while 21% did not consider it effective or feasible. The reasons are listed as follows:

1) High costs associated with such initiatives,
2) Tourists' demand for luxury required during tours,
3) No clear governmental guidelines on how to comply with the Seven Greens initiative.

Table 2: The percentage of respondents answering to four questions related to the Seven Greens initiative (Ponluksanapimol, 2011)

Questions	Tourism Service Providers			Individual Respondents (tourists and local people)			Remarks
	Yes	No	Don't know	Yes	No	No answer	
Have you heard of the 7-Greens initiative?	52%	48%	-	35%	52%	13%	90% of local people said "No"
Are you aware of the importance of protecting the environment while conducting tourism activities in Nan?	94%	0%	-	91%	-	4%	6% of tourism service providers and 5% of individual respondents were neutral.
Are you conducting your business according to the initiative?	57%	4%	39%				
Is the 7-Greens initiative easy to comply with ?	46%	21%	32%				

This clearly demonstrates the need for increased awareness among individuals on the importance of the Seven Greens elements. Additionally, it reflects the lack of governmental planning and support via relevant legal frameworks. Ensuring such legal framework will help facilitate implementation and force businesses to incorporate sustainability into their business models rather than viewing it as an additional cost.

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4.2   Awareness of Environmental Protection

When the respondents were asked if they were aware of the importance of protecting the environment while traveling in Nan, more than 90% of both individuals and business respondents responded in the affirmative, which suggests high awareness among tourism stakeholders, regardless of the Seven Greens initiative.

4.3   Performance of Each Seven Greens Element

The overall performance of the Seven Greens initiative in Nan is measured based on the responses from the questionnaire. Note that tourists and local people were not evaluated on "Green Community", "Green Attractions" and "Green Service".
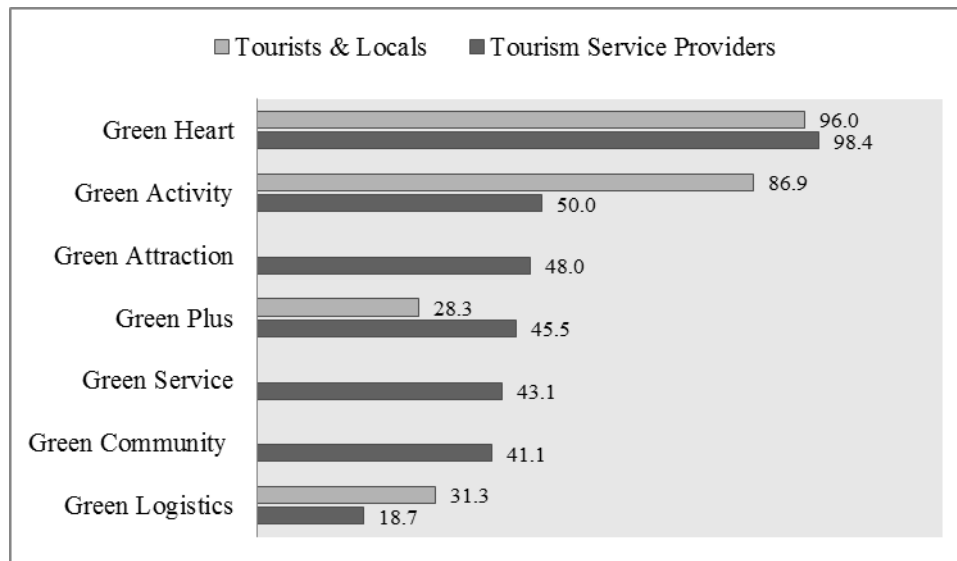
Chart 1: Overall performance of Seven Greens by individual respondents and tourism service providers (Ponluksanapimol, 2011)

It is revealed here that the least successful "Greens" for individual people were Green Logistics and Green Plus while tourism service providers found it difficult to meet the expectations of the Green Logistics, Green Community, and Green Service initiatives.

It is therefore clear that additional support for Green Logistics, efforts to encourage the provision of Green Services and to improve community awareness of the importance of sustainability are necessary in order for Nan to grow into a fully sustainable tourist destination.

In Chart 1 and 2, a score out of 100 was given to each respondent on each relevant "Seven Greens" aspect based on their responses. The average was then taken to form an analysis and is illustrated in the charts below.

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Behavior Score (%)	Overall	Locals	All Tourists	Eco-tourists	Temple-tourists	Other-tourists
■ Green Heart	96.0	100.0	94.9	100.0	93.8	95.4
▢ Green Activity	86.9	80.0	89.1	100.0	78.6	84.6
■ Green Logistics	31.3	22.2	33.9	37.5	41.7	26.0
■ Green Plus	28.3	27.0	28.8	26.5	27.1	29.0

Chart 2: Overall performance of each Seven Greens element taken from individual respondents (Ponluksanapimol, 2011)

In Chart 2, note that Green Community, Green Attractions, and Green Service are excluded from this analysis as individual respondents could not be measured for the same. Chart 2 suggests that overall, most tourists and local people have a Green Heart and are engaging in Green Activities. However, Green Logistics and Green Plus are the two aspects that are often ignored and for which improvement and added support are therefore required. Another point is that the average score for Green Plus was the lowest among eco-tourists compared with other types of tourists. This indicates that eco-tourists are not contributing so sufficiently as expected to the environment and communities that they visit and that a Green Plus concept should be emphasized to tourists in the ecotourism areas.

The next analysis was performed by analyzing the answers of respondents who were tourism service providers. A score out of 100 was given to each respondent on each relevant "Seven Greens" aspect based on their answers. The average was then taken to form an analysis as illustrated in Chart 3.

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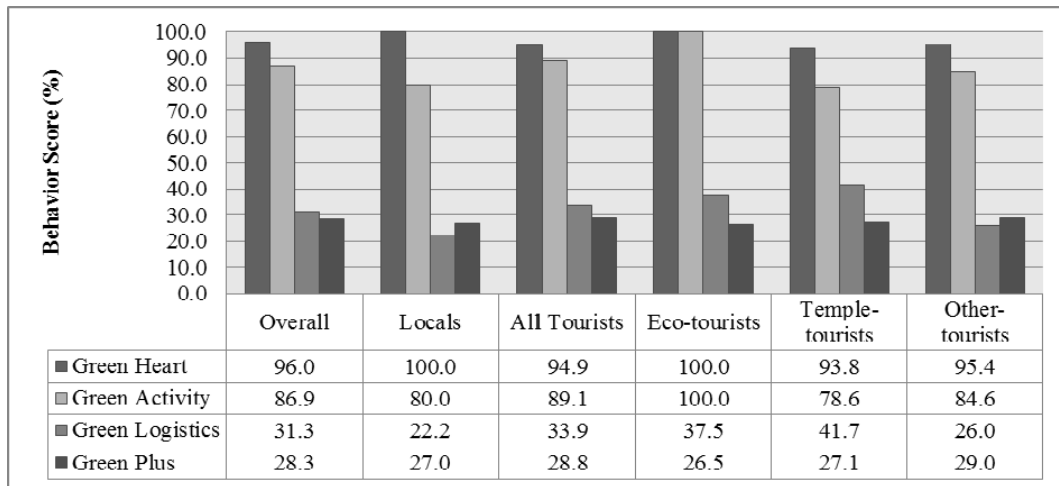|	Overall	Tour Operators	Temples	Shops	Restaurants	Hotels
■ Green Heart	98.4	100.0	100.0	100.0	95.8	100.0
■ Green Activity	50.0	50.0	0.0	0.0	0.0	0.0
■ Green Attraction	48.0	0.0	48.0	0.0	0.0	0.0
■ Green Plus	45.5	68.8	25.0	40.6	47.5	12.5
■ Green Service	43.1	87.5	0.0	37.3	48.7	21.5
▫ Green Community	41.1	68.8	25	40.6	39.6	8.3
■ Green Logistics	18.7	33.3	28.9	10.7	20.0	8.3
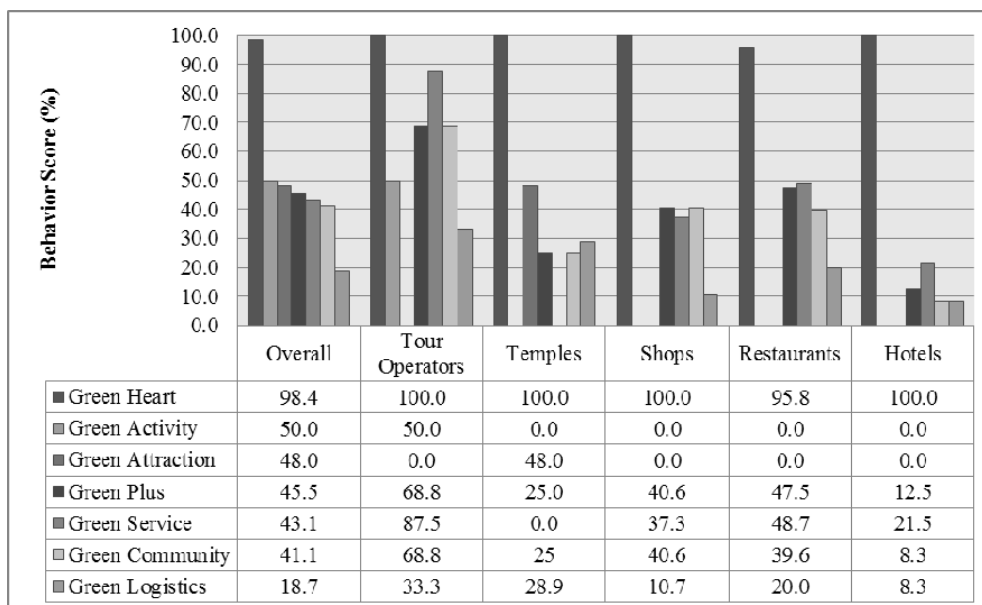
Chart 3: Overall performance of each Seven Greens element taken from tourism service providers (Ponluksanapimol, 2011)

Chart 3 suggests that for tourism service providers, Green Logistics, Green Service, and Green Community are the top 3 aspects requiring improvement.

Tour operators still encourage their customers to use planes and chartered vans as a means of transportation to and within Nan. One reason is that there are no railways to Nan and no convenient public transport for tourists, hence the need for governmental support in creating a more effective logistics system. This contradicts with the idea of Green Logistics and Green Service.

In terms of Green Community, tourism service providers are not seen to be taking the lead in extending the concept of sustainability to the local community. Local tourism service providers should contribute to leveraging the community's capability in sustaining Nan's tourism and participate in sharing information with the local community. They should also contribute to the environment by using a more energy efficient logistics and devise new services that are friendlier to the environment and community in order to add value to the latter.

It is also interesting to note here that the tourist attraction operators who responded to the questionnaire were unaware of the Seven Greens concept whereas all tour operating companies knew about it. More effective marketing and training strategies must be implemented so that all the relevant providers are well informed.

5 CONCLUSION
It is apparent that although the tourists and residents of Nan are aware of and determined to save energy to conserve the environment and sustain Nan's tourism, the message of the "Seven Greens" and the government's advisories were not conveyed as effectively as could have been the case. Efforts to strengthen community and personal awareness and persuade more people to adopt these concepts are still needed. Despite the research results showing the genuine interest of the Thai government in promoting green tourism among tourists, the local

community and tourism service providers in Nan Province, its initiative was not very effective. Infrastructure, legal framework, human resources, and personal contributions are the four areas with room for improvement in Nan.

Furthermore, individuals, groups and organizations must agree to contribute their physical energy and contribute more ideas and investment to conserve Nan more actively and efficiently. The emphasis on knowledge and implementation among local people and tourists must be enhanced in order to encourage concrete actions and physical contributions to sustain tourism. Currently, although individuals are well aware of the significance of sustainability, they lack sufficient governmental support or social guidelines to fully turn these intangible concepts into action and incorporate them into their daily lifestyles.

The key is to ensure a policy to promote and manage sustainable tourism is further reinforced. The following were identified as obstacles to the development of sustainable tourism in Nan Province:

1) The lack of an effective mechanism for monitoring and implementing sustainable tourism
2) The lack of an adequate legal framework to support the implementation of sustainable tourism
3) The lack of investment in infrastructure projects that can reduce environmental impacts associated with tourism-related activities (for example, transportation infrastructure)
4) The lack of contributive actions from different parties on elements of sustainable tourism and how each of them contributes to the overall performance of sustainable tourism
5) The government must also include domestic tourism in its plans rather than focusing on supporting foreign tourists. This will promote implementation and behavioral awareness among Thai people, which can be expanded to other Thai provinces.
6) The lack of human resources in tourist areas, including hotels and attractions.

It is believed that tourism in Nan still has positive outlook if these problems are addressed and if all stakeholders take part more actively. Nan could become a model city for sustainable tourism. To achieve that, a more extensive research is being conducted and more samples are being collected to grasp a better understanding of the tourism situation in Nan.

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THE PROSPECTS OF INTERNATIONAL ACQUISITIONS IN CAR INDUSTRY DURING THE GLOBAL ECONOMIC CRISIS - THE CASE OF GEELY VOLVO

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ABSTRACT

Significant technological, social and economic changes on the global level marked the beginning of the 21st century. Growing importance of Chinese economy stands out as one of the most important among these changes. Accelerated economic development of China was first based on FDI inflow and the export of low-cost less technology intensive products. However, a gradual alternation to Chinese economic policy and the growth of outward FDI followed by a global breakthrough of some Chinese companies operating in technology intensive industries (Huawei, Lenovo, Mindrey, Haier etc.) has been marked in the past few years. Further economic development of China will to a large depend on the positioning of Chinese car manufacturers. In this paper the stress will be put on high technology intensity in car industry, on its global character, high concentration within the industry and on market saturation in developed countries due to global economic crises. Basic characteristics of automotive industry and its development will be considered regarding prolonged economic crisis. Current local character of Chinese car manufacturers and its going global prospects will be observed. In order to become global players Chinese car manufacturers could implement the acquisition strategy of some key competitor from developed countries. Chinese car companies aimed at relatively small targets in the previous period because they were inexperienced in acquisitions and restructuring management and tended to decrease risks. The last and the most important is the acquisition of Swedish Volvo by Chinese Geely. These are the companies significantly differing in the level of technology, corporate and national culture, brand perception and geographic orientation of business operations. Potential risks that follow these differences as well as potential synergetic effects, supposing that the acquisition process is properly managed, will be considered in the paper.

Keywords: Acquisitions, Auto industry, China, Synergy

1 INTRODUCTION

The globalization process, having been intensified over the last two decades, has had profound impact on the international business environment. One of the most important results of this process is the integration of national economies into global economy. According to some research Chinese economy was the fastest globalized national economy between 1975 and 2000 (Dreher, 2006, pp. 1091−1110). Deregulation of Chinese economy and integration into global economy set the bases for its strong economic growth. Despite the poor starting point, China has become the second world economy for only two decades. China GDP has shot up in the past two decades and was multiplied more than eleven times. Likewise, GDP per capita was multiplied 9.5 times. Some researchers believe that without structural reforms and stimulation of domestic demand China will very soon hit the peak of its economic

growth. Global economic crises and falling demand for Chinese products in their main export markets (i.e. European Union) support these ideas. The World Bank's latest research expects Chinese economy to cool off, but in spite of the slowdown it forecasts strong GDP growth rates, compared with developed economies (World Bank, 2012, p. 81).

China's development in the last two decades has been based on strong FDI[1] inflow, which rose from USD 4 billion to USD 185 billion. Big MNCs[2], usually from developed economies, have used its subsidiaries in China as export-platform FDIs. Strong presence of export-oriented MNCs and deregulation of economic policy have allowed Chinese companies go global. The first wave of the internalization comprised work intensive industries. Nevertheless, in the past few years a number of Chinese companies performing in high technology industries have become global competitors (Lenovo, Huawei, Haier, ZTC, Mindray etc). These companies are still exception rather than the rule, and it seems clear that more players from China will enter the global field in the years to come.

Due to large R&D investments and high market saturation in the global auto industry market, new entrants cannot easily penetrate it. Today's Chinese car industry is not globally competitive, though some companies strive to internationalize their business operations. Several Chinese car companies made international acquisitions to achieve this goal. The last and the most important has been the acquisition of Swedish *Volvo* by Chinese *Geely*. This acquisition is estimated to be very risky due to its size, investor's lack of experience in acquisition management, and the differences between national and corporate culture of the investor and the target.

This paper consists of three parts. The first part offers theoretical explanation of horizontal acquisitions. The motives behind the acquisitions of enterprises operating in the same industry will be examined. The second part of the paper gives a review of the present situation in auto industry and its future prospects. The focus will be on the market position and the future role of Chinese car manufacturers. The third part of this paper offers the analysis of the motives behind *Geely*'s acquisition of *Volvo*, potential benefits and risks involved in it.

2 THE ROLE OF CROSS BORDER ACQUISITIONS IN CONTEMPORARY BUSINESS ENVIRONMENT

Before the global economic crisis international acquisitions recorded constant, though unsteady growth. In this period both the number and the value of international acquisitions increased. In 2007 the value of international acquisitions was more than USD 1,000 billion and they reached the historic peak, while in the next two years they suffered a sudden downturn, and in 2009 their value was USD 250 billion. In 2010 and 2011 an appreciable growth of international acquisitions was recorded, though its value accounted for something more than the half of its historic peak (UNCTAD, 2012, pp. 177−180). The dynamics of international acquisitions varied from industry to industry. Its dynamics in car industry did not entirely correspond to global economic trends.

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[1] Foreign Direct Investments

[2] Multinational Companies

Table 1: The value of international acquisitions in car industry in million USD (UNCTAD, 2012, p. 185)

	Value of transactions	*Number of transactions*
2005	8.524	78
2006	7.475	84
2007	3.099	86
2008	11.608	95
2009	8.753	74
2010	7.488	84
2011	5.370	87

According to Table 1 international acquisitions in car industry reached its peak exactly in the crisis period. These relatively unexpected trends regarding the global economic trends must be observed through the comparison between pre-crisis and post-crisis structure of the industry. This is to say that a considerably high market concentration in auto industry before the crisis did not leave much room for further acquisitions. Some car manufacturers were, however, severely hit by the crisis and had to seek restructuring through bankruptcy, while the others had to divest some of its operations. Car companies that successfully survived the first wave of the crisis (*Volkswagen and Fiat*) and companies from emerging markets (*Geely*) seized the opportunity stemming from the competitors' unfavorable position and took over some or all of their operations. In the last two decades, in the Fifth Wave mergers and acquisitions, the number of horizontal acquisitions has rapidly increased. In this period companies tended to utilize the positive economic trends in the West as well as deregulation of world economy (Gaughan, 2007, p. 59). The Fifth Wave acquisitions are to a large the consequence of the MNCs' strategies of focusing on the cornerstone of competitive advantage and divest from highly diversified business operations. This applies to car industry too.

In business economics acquisitions have been analyzed from different aspects with the aim of identifying the motives behind them, effects they produce, the causes of success or failure, and how to advance the acquisition process itself. In spite of extensive theoretical and practical researches into this field failure rate of acquisitions remains high. Most analyses show that more than 50% of acquisitions fail and the often quoted research carried out by KPMG shows that on average 53% of acquisitions is value destroying, 30% have no effects on value, and only 13% of acquisitions create value (Kelly, Cook and Spitzer, 1998, p. 2). The most recent research in this field shows that the success rate of acquisitions is much higher if investors from emerging markets acquire targets from developed markets. This is because intangible resources possessed by companies from developed markets complement country specific advantage of emerging markets multinationals (Gubi, Aulaks, Ray, Sarkar and Chittoor, 2009, pp. 397–418).Considering the high failure rate of acquisitions it is necessary to classify them according to their goals: (1) acquisitions by which companies try to advance its business performance without changing the business model (2) acquisitions by which companies try to reinvent their business model (Christensen, Alton, Rising and Waldeck, 2011, pp. 49−57). Through the first type of acquisitions companies try to maintain their strategic position and it is more frequent than the second one. Investors often have high expectations about these acquisitions and the premiums paid for them can be very high. On the other hand, less frequently the goal behind acquisition is to reinvent the existing business model and to create a new strategic position. Acquisitions of targets from developed markets

by investors from emerging markets fall under the second type of acquisitions. The motive behind all acquisitions is to achieve synergy. Synergy can be achieved via operational and financial synergy. The effects of operational synergy through acquisition will not be produced equally fast and do not have equal prospects of success (Cullinan, Le Roux and Weddigen, 2004, pp. 97−104). Figure 1 shows operational synergy map that can be represented in the form of concentric circles.
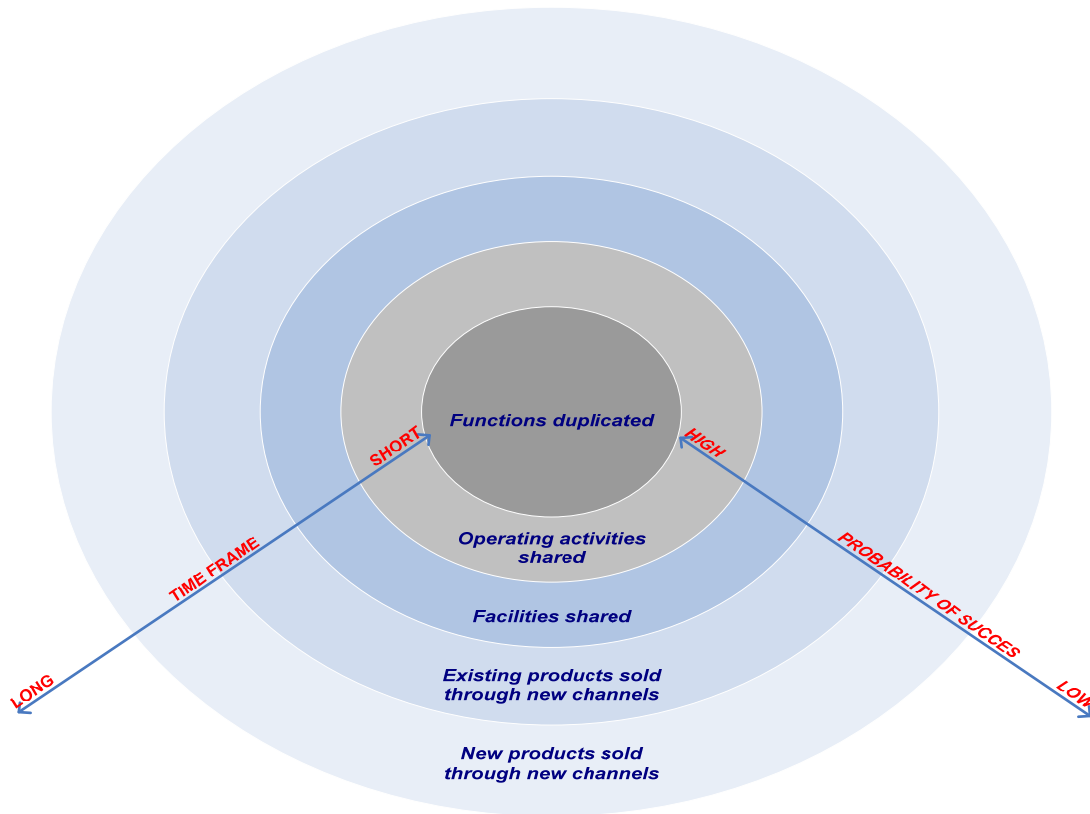
Figure 1: Operational synergy map (Cullinan, Le Roux and Weddigen, 2004, pp. 97–104)

During Due Dilligence process, but also in post-acquisition period, cost reduction is investor's top priority. There are several reasons for this. Cost reductions can be quiet easily identified and quantified, and most often they can be easily achieved in short term. Rapidly achieved considerable cost reduction contributes to so called "early victories". "Early victories" must be promoted among the stakeholders, especially among the investors and creditors (Habeck, Kroger and Tram, 2000, p. 68). Cost reductions especially gain in importance in consolidated industries such as car industry. The main characteristic of consolidated industries is overcapacity. One of the first measures investors in these industries take after acquisition is elimination of surplus capacities. Investors thus eliminate fixed costs, and consequently decrease pressure on prices and increase profit margins (Sudarsanam, 2003, p. 106). This is a one-time cost reduction. These measures concern both production and nonproduction employees and entire production facilities. Acquisitions in car industry often include these measures, primarily closing production facilities in countries with expensive labor force. Elimination of overcapacity is closely related to economy of scale. Economy of scale can be achieved in almost any area starting from R&D, production, distribution channels and advertising. It gains in importance in industries with high fixed costs, such as car industry.

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Building competitive advantage only through economies of scale is a high-risk strategy in the world of hypercompetition and constant technology innovations.

Apart from economies of scale, economies of scope can contribute to cost reduction too. Economy of scope is the use of available resources not only in current business operations but also in similar business operations. In auto industry economy of scope can be achieved through usage of a flexible production line. Economy of scope is, however, expected to be the most effective in R&D. Considering that 88% of innovations do not achieve expected investment return, and a large number of them are soon after its implementation successfully imitated by competition, companies tend to apply their innovations in production of as many products as possible. *Honda,* for example, applied internal combustion engine innovations in production of motorcycles, automobiles, but also loan mowers and artificial grass cleaners (Ireland, Hoskisson and Hit, 2009, p. 188). Acquisitions offer new opportunities to achieve economy of scope, though it is quiet hard to identify and quantify them.

In addition to cost reduction, the motive behind many horizontal acquisitions is revenue above the simple sum of investor and target's revenues. In Due Dilligence investors pay little regard to revenue increase opportunities. Revenue-based synergy can be achieved through complementary products, reputation spillover, usage of the existing channels for new products, development of new products and distribution channels etc. Revenue-based operational synergy involves considerable risks, and it can be achieved in the long run (see Figure 1). Revenue-based operational synergy through acquisitions within consolidated industries is extremely hard to achieve. Many companies, therefore, must seek growth opportunities in geographic segments with low market saturation.

Another motive behind horizontal acquisitions can be financial synergy, which contributes to lower cost of capital. If there is not a high level of correlation between the cash flow of investor and target, creditors can perceive the acquisition as an instrument of financial risk management. Possibilities of cash flow diversification are fairly limited because car industry is globalized and the manufacturers face hypercompetition. Cost of capital can, however, be lowered via acquisitions of companies that generate the majority of its cash flow in different markets or by different segments. Case study presented below proves this statement.

Investors sometimes make acquisitions to reinvent their business models. By this investors try to set a new long-term growth basis, and thus advance its competitive position (Christensen, Alton, Rising and Waldeck, 2011, pp. 49−57). These acquisitions are made if investors lack capacities to keep up with technology innovations or beat off severe competition. When investors estimate that the present production portfolio or market portfolio cannot provide for long-term growth, acquisition of a company possessing the lacking resources is necessary. This can mean penetration into new geographic markets, new market segments or launch of an entirely new product. This radical change of the existing business model made through acquisition involves considerable risks. Identification of the resources essential for business model reinvention, that is to say identification of target, is of crucial importance. Integration process, which usually requires changes both in target and investor's organization structure, must be carefully planned and implemented. Evaluation of target via quantification of the effects acquisition brings about is quiet challenging. *Geely's* acquisition of *Volvo* is a typical example of an acquisition made to reinvent investor's business model.

3   THE DEVELOPMENT OF GLOBAL AUTO INDUSTRY AND THE PROSPECTS OF CHINESE COMPANIES

Car manufacturers have been severely affected by the global economic crises, although not equally in all markets. The biggest drop in production happened in the USA. The production of all vehicles down fell from 10,780 thousand in 2007 to 5,709 thousand units in 2009 (OICA, 2012). The falling demand and overcapacity in the industry created huge problems for the "Big three" from Detroit. In June 2009 General Motors filed for bankruptcy protection and the USA government acquired 60% of its shares. In the same year Chrysler filed for bankruptcy protection and after several investments in it, Fiat gradually became major shareholder of the company in July 2011. Ford evaded the bankruptcy but had to restructure business operations and sell some brands and affiliates. The crises very soon overflowed to the other side of the Atlantic and hit European markets. The production of vehicles in Europe dropped from 22,856 thousand in 2007 to 17,009 thousand units in 2009 (OICA, 2012). European new passenger car registration fell by 7.8% to 14,713 thousand units in 2008, recording the sharpest decline since 1993 (ACEA, 2009). The negative trend continued in 2009 and new passenger car registration dropped by 1.6% comparing to previous years, despite significant financial support by governments. The sharp decrease in demand puts a lot of pressure on the companies to sell off business units and lay off workforce.

The crisis has affected the emerging auto markets as well, though to a lesser extent than it struck car manufacturers from developed countries. Car industry experts forecast that the sale in both developing and developed countries will equalize and reach the level of 35 million units. Growing demand in emerging markets has attracted significant investments made by both developed and domestic companies. This increased the production, especially in China. Despite the crises car production increased from 8,886 thousand units in 2007 up to 18,419 thousand units in 2011, which brought China to the very top of the list of global auto producers (OICA, 2012). China owes the lion share of its car production to foreign subsidiaries, although domestic companies have made huge steps forward.

Today's new business environment created global expansion opportunities for Chinese car companies. Overcapacity in the industry, financial problems of some important competitors and global focus on clean energy work in Chinese manufacturers' favor. If China's companies manage to exploit these trends, they will be able to go global and challenge the industry leaders. Consolidation on domestic and global markets is relevant to China's auto industry. The fact that there are about 150 domestic car companies in China made central and regional governments put soft pressure on the companies to consolidate their operations. Consequently, there were two China-China acquisitions on the list of top 10 deals – vehicle manufacturers in 2011, worth more than USD 4.8 billion (PriceWaterHouseCoopers, 2012, p. 14). Car industry overcapacity on the global market is the consequence of falling demand in developed markets and huge improper investments in the pre-crisis period. In the KPMG survey some 41.5% of respondents consider the USA to be overbuilt market, even though the USA manufacturers have reduced capacity in the last four years by more than 1 million vehicles. Respondents believe that overcapacity of German and Japanese markets is between 11% and 20% (KPMG, 2012, p.46). The overcapacity is a precondition for the wave of China's cross border acquisitions in the industry. By acquiring the assets of a distressed but well known international manufacturer, China's auto companies are hoping to significantly accelerate their development and market penetrations (Russo, Tse, Ke and Peng, 2009). The structure of global auto industry in the future will depend on the technology innovation in construction of hybrid or electric cars and their commercialization. The development of green

vehicles and consumers' favorable response to them is important to every country, but most of all to China. Significant progress in this field will help China decrease its dependence on foreign oil, with wobbly prices, and reduce pollution and greenhouse emissions, as some of the main obstacles to its medium term strong growth. According to China's five year plan production of green vehicles is going to be a strategic industry which will receive over USD 15 billion of investments in a bid to have one million cars on the road by 2015. The significant part of the investment will be in the rapid development of necessary infrastructure, more than 2,000 charging stations and 40,000 charging poles (KPMG, 2012, p. 14). However, the first results of the initiative are disappointing (Krieger, Rathke and Wang, 2012). Analyses of the above mentioned determinants give four possible scenarios of China's auto industry development until 2020 (see Figure 2).

		NO	YES
China's car producers develop significant scale advantages in clean techs	**Yes**	**The clean tech advantage** Market share: *3%-6%* Profit pool: *USD 1 − 3 billion*	**A Perfect storm** Market share: *7%-15%* Profit pool: *USD 4 − 8 billion*
	NO	**The Following in Hyndai's footstep** Market share: *0%-3%* Profit pool: *USD 0 − 1 billion*	**A helping hand** Market share: *3%-6%* Profit pool: *USD 1 − 3 billion*

China's car producers acquire one or more major developed markets car companies

Figure 2: Scenarios of China's car industry development (Barbosa, Hattingh and Kloss, 2010)

The panelists in McKinsey survey saw 40% of likelihood that China's car companies will not grasp green car production or acquire any major car companies in the current decade. This implies that China's car companies will play a marginal role on the global market. On the other side is the scenario in which China's car companies aggressively enter developed markets, through one or more significant acquisitions and clean technology advantage. The panelists in the survey gave it 10 to 15% chance that this scenario will be realized during the current decade (Barbosa, Hattingh and Kloss 2010). The future position of Chinese car industry will to a large depend on duration of global crises, its impact on China's economy and restructuring activities of key players in the industry.

4 VALUE CREATION THROUGH INTERNATIONAL ACQUISITIONS – CASE OF GEELY – VOLVO ACQUISITION

During the last decade Chinese car companies have achieved a strong growth. However, the level of internationalization of these companies is rather low because they use their own capacities or create joint ventures with leading MNCs to serve primarily the growing domestic market. Chinese government created incentives to accelerate consolidation of car industry and to help at least one car manufacturer from China become one of the top ten car manufacturers. These companies will not be able to achieve greater penetration into the global market via internal development, due to severe competition in the industry and lack of intangible resources (brand, technology etc.). As it was mentioned earlier the solution to this

problem could be acquisition of targets that possess the lacking resources but are facing financial problems due to global economic crisis. In the last few years there have been made some attempts at acquisitions of car companies from developed countries but they were not fully successful or failed. *Geely – Volvo* acquisition worth USD 1,8 billion has been the most serious attempt at global positioning made by a Chinese car company. *Geely* is contractually obliged not to outsource company headquarters from Sweden, not to cancel production capacities in Sweden and not to lay off acquired employees.

Enormous differences between the investor and target are the peculiarity of this acquisition. *Geely* was a local Chinese company manufacturing cheap and poor quality vehicles. Total sale in the year of acquisition accounted for 400 thousand cars, and marked 29% growth in sales compared with the year before the acquisition was made (OICA, 2012). The net profit generated in the year of acquisition accounted for around USD 200 million, that is to say the net profit increased by USD 12 million compared with the year before the acquisition was made. These impressive results are primarily due to growing demand in domestic market, but also to business rationalization measures. On the other hand, *Volvo* is a global company producing high class and mid class cars. The company has built a worldwide reputation as a manufacturer of safe and high quality vehicles. In 2009, due to the global economic crisis, *Volvo*'s sale dropped by 30% and the company suffered more than USD 650 million net loss (Wang, 2011, p. 28). Since *Volvo* was part of *Ford's* group, these extremely poor results made *Ford* disinvest from *Volvo*.

Because there are considerable differences between these two companies' competitive position, corporate and national culture, organizational structure and the strategic approach they take, it will be a great challenge to implement the acquisition and achieve synergy. According to the acquisition plan the companies will continue operating separately due to considerably different product lines, consumer segments and brands. This strategy is aimed at: (1) growth in sale of *Volvo* vehicles in Chinese market (2) reduction in operational costs (3) internationalization of *Geely's* operations and growth in *Volvo's* global sale. This is the type of acquisition which is made to radically change business model used by investor.

Because *Volvo* produces luxury cars the production itself involves high fixed costs. The largest proportion of *Volvo's* fixed costs is comprised of R&D costs and wages, due to rather restrictive labor laws in Sweden. To overcome this problem it is necessary to increase production and sale, meaning to achieve economies of scale. The goal set in the acquisition plan is to reach the production of 600 thousand *Volvo* vehicles by 2015, and around 800 thousand vehicles by 2020 (Volvo, 2012a). This goal can be achieved only through increased sales in emerging markets, primarily in Chinese market. The strategic goal is to sell more than 200 thousand *Volvo* vehicles in China by 2020. To reach this goal *Volvo* has already invested in two assembly plants and one engine plant (Volvo, 2012b). The positive results were soon achieved. In 2010 *Volvo* sold 31 thousand vehicles and increased sales by 50% compared with 2009 (Volvo, 2010). Sales growth continued in 2011 when the sales in Chinese market amounted to more than 47 thousand vehicles, and China became one of the three markets of utmost importance to *Volvo*. In the first half of 2012 *Volvo's* sales in Chinese market recorded almost negligible growth. Growth in sales will to a large depend on application of *Geely's* local knowledge, development of local dealer network and on whether *Volvo* is included in government car procurement list, dominated by *Audi* and *Mercedes*, since government car procurement accounts for about 8% of national car sales (*Wang*, 2011, p. 44). European brand

enjoying good reputation that have recently acquired local dimension, which is of special importance to ethnocentric consumers, is especially useful for further expansion.

Quiet high costs considerably eroding profit margins have been one of the main problems *Volvo* faced with in the previous period. *Volvo*'s assembly and production plants being built in China, whose capacities are beyond the expected sales in China's market, will significantly contribute to cost reduction. This will reduce labor force costs but also transportation costs involved in export to other countries in East and Southeast Asia. Additionally, already developed *Geely's* distribution network in China will reduce the costs of developing a new one. This strategy also involves establishment of R&D centre in China. The motive behind R&D outsourcing is cost reduction through cheaper highly qualified workers. In 2009 more than 2/3 of goods and services were sourced from Sweden, France and Belgium (countries with high costs of production) and there was no local sourcing. Employment of local suppliers that are experienced in cooperation with multinationals and meet quality standards can reduce costs. According to *Volvo's* China market entry strategy in a locally produced *Volvo* car around 60% to 80% will be sourced from China. Local sourcing will to a large depend on *Geely's* network of suppliers. The China market entry strategy is based on exploitation of location specific advantage combined with high safety standards and recognizable brand (Rugman, 2009, pp. 42−63). Apart from operational synergy, financial synergy is expected to be achieved through this acquisition. Because *Geely* and *Volvo* serve different consumer segments and markets there is a low correlation between their cash flows, which has positive effects on cost of capital (Zhou and Zhang, 2011, pp. 5−15).

Finally, the major goal behind the acquisition is internationalization of *Geely's* business operations. Safety standards were a big obstacle for *Geely's* penetration into the Triad markets (Zhou and Zhang, 2011, pp. 5−15). Because car industry is technology intensive, considerable investments are necessary. Internally generated technology innovations would soon prove insufficient for a more aggressively internationalization of *Geely's* operations. Through this acquisition *Geely* acquired the right to exploit technology innovations in safety, and technology innovations in highly efficient engines developed by *Ford* and *Volvo*. Due to this, the model Emgrand EC7 has received four star ratings out of maximum five, which was a precondition for *Geely's* expansion to European market (Wautom, 2012).

Although this represents a huge step forward, further success of the company will to a large depend on its capacity to develop and commercialize its own technology innovations. This can be achieved only through investments in R&D, and engagement of lacking experts. Lack of global experience and undeveloped channels of distribution can be a big obstacle to international expansion. *Volvo* management can actively participate in the development of organizational structure most suitable to *Geely's* global expansion, and *Volvo's* experience and network of contacts in developed markets will contribute to establishment of distribution channels. The biggest challenge facing *Geely* is development of its own brand. In the domestic market *Geely* brand has the reputation of being cheap and of poor quality and it is quiet unknown in global market. Improvements in the quality of products through acquisition of *Volvo*'s technology innovations can improve the reputation *Geely* has. Brand development must be focused on "value for money" consumer segments because this segment has been neglected due to KIA and Hyundai's shift to segments with higher purchasing power. Because this brand is fairly unknown in the global market it is possible to introduce it in developed markets as innovative, safe and affordable. To achieve international success it is highly

important to promote *Geely* brand without any reference to *Volvo* brand, otherwise, *Volvo*'s reputation might be damaged.

Due to different national and corporate cultures, *Geely* decided to give *Volvo* great managerial autonomy. *Volvo's* top management was retained, and the company is run by the board of directors comprised of local managers and only one director from China. By not integrating *Volvo* into its business system *Geely* maybe did not fully exploit cost reduction opportunities, however, through this strategy it avoided making mistakes common to international acquisitions (Prashant, Singh and Raman, 2009, pp. 119−115). The first analysis of abnormal returns of each company's stocks during the announcement period shows that the value was not created through acquisition (Chandera and Windjojo, 2012, pp. 129−143). The fact that at the end of 2012 The China Development Bank granted *Volvo* EUR 922 million loan through *Geely's* mediation, for the purpose of paying off its matured liabilities and with the maturity of 8 years supports this statement. Before making final conclusions about the success of this acquisition it should be pointed out that investors from emerging markets are often confused about short-term goals, hence the impression that no value is created through acquisition. However, acquisitions based on clear vision and long-term orientation will certainly create value in its last instance (Kumar, 2009, pp. 2–9).

5 CONSLUSION

Global economic crisis created favorable conditions for more intensive acquisitions in car industry. In the previous period there were several acquisitions of small low performing car companies from developed countries by investors from Chine. The last and the most significant due to value of transaction and high brand awareness was *Geely – Volvo* acquisition. Chinese investors try to reinvent their business models and improve competitive position through acquisitions of companies from developed countries. Future competitiveness of Chinese car manufacturers will depend on their capacities to grasp production of electric cars or perhaps on acquisition of another big car company from developed countries.

Geely – Volvo acquisition will show whether Chinese car companies have capacities to manage international acquisitions. Investor's lack of experience in international acquisition management, financial position of the target and differences between investor and target's national and corporate culture significantly increase the risks involved in this strategy. Revitalization of the target via economies of scale achieved through increased sales is one of the two main tasks *Geely* has taken on. This can be accomplished only through penetration into emerging markets. The first step towards this goal is establishment of two assembly plants and one engine plant in China that will serve both domestic and neighboring markets. *Geely's* local contacts and investments will allow *Volvo* penetrate local distribution channels. The second task *Geely* has taken on is to grasp technology innovations in safety in car industry considering that *Geely* vehicles failed crash tests, which are a precondition for expansion to European market. *Geely* increased its safety standards through application of the acquired technology innovations and in 2012 NCAP model received four star ratings out of maximum five in the crash test. Through advancements in quality and design of its products *Geely* should gradually build up and position its brand as "value for money".

To decrease the risks involved in integration of target *Volvo* has been given a great managerial autonomy. Potential disagreements that may arise from different corporate culture have been thus evaded and a great stimulus to the acquired management came from it. Finally, by not integrating these two brands management prevented a spillover of *Geely* brand poor

reputation to *Volvo* brand. The analysis shows that there was no short-term value creation through this acquisition. However, this acquisition should not be regarded as unsuccessful because the goal behind it is not to achieve short-term financial effects but to radically change *Geely's* business model in the long run.

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INTERNATIONAL POSITION OF ESTONIA IN IMPLEMENTING RESEARCH AND DEVELOPMENT POLICY[1]

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ABSTRACT
The research and development policy (R&D policy) plays a central role in innovation policy since it consists of public sector measures that initialize and promote innovation. When designing policies in other areas (education, employment, fiscal, tax policy, etc.) the mutual interactions with R&D policy should be considered. The article first discusses the theoretical reasoning for public sector intervention in R&D processes. In general, the existence of market and system failures is used as a justification for government intervention. The government should intervene with adequate measures and only in an extent that is needed to overcome the failures. At the same time, the government should avoid overreacting and prevent giving state aid that distorts competition in the market. This study examines the level and structure of R&D policy resources and expenditures in EU member states and in countries that are closely linked to EU. Thus, the evaluation of the role of the R&D policy in innovation system is given. However, it has to be considered that different countries (small and large, developed and undeveloped, with open and closed economies) have different innovation policy goals and measures to achieve them. In addition, the R&D policy is designed in even wider institutional conditions. All of these qualitative aspects have to be considered when interpreting the results of quantitative comparative analysis of countries' R&D policies. The aim of the articles is to assess the international position of Estonian R&D policy in the aspects of resources and expenditures among EU member states and other closely linked countries in order to create the basis for an international comparative analysis of Estonian R&D policy. In order to achieve the aim, the following research tasks are posed and resolved:

- *on the basis of research literature, the necessity, essence, measures and anticipated outcomes of R&D policy are explained;*
- *on the basis of empirical analysis, the assessment on the international position of Estonian R&D policy implementation among EU member states and other closely linked countries is given.*

The data used in the empirical analysis (32 countries in years 2004, 2006 and 2008) is gathered from Eurostat database (including Community Innovation Surveys) and the component analysis is conducted. The results allow to design Estonian R&D policy measures that are based on acknowledged theoretical viewpoints and international experience.

Keywords: Innovation policy measures, Market failures, R&D policy, System failures

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Enterprise in Turbulent Environment

1 INTRODUCTION

The central role in innovation policy development is executed by research and development policy (R&D policy), which represents the major complex of public sector measures to initiate and promote innovation. The objective of the current study is to assess the international position of Estonia among EU member states and countries closely associated with EU in respect of R&D policy implementation from resource supply and cost aspect. In order to achieve the objective, the following research tasks were set and fulfilled:

- through scientific literature the necessity amd nature of R&D policy were identified;
- through empirical analysis an assessment was given to the international position of Estonia in implementing R&D policy among EU member states and countries closely associated with EU.

The results of the research help to design Estonian R&D policy development measures, also taking into account theoretical approaches and international experience.

2 THEORETICAL BACKGROUND OF RESEARCH AND DEVELOPMENT POLICY

2.1 Elimination of market failures

Already for decades attention has been focused on an aspect that R&D outcomes have more the nature of public than private good (Nelson, 1959; Arrow, 1962). To large extent, their consumption has no rivalry – the invention or innovation can be used in parallel and the utility can be acquired by endless amount of consumers without changing the nature of the innovation or invention (see Romer, 1990; Grossman and Helpman, 1991; Aghion and Howitt, 1992). Still, there is market competition in R&D activity – the utility of innovation or invention for the first marketer remarkably decreases after it is being applied by competitors. From the viewpoint of the first user of invention or innovation, it raises an important problem of excluding unentitled persons (competitors) from the consumption of R&D work (the protection of intellectual property). As the protection of intellectual property is often so difficult and expensive, the economic rationality of its application should be considered. Therefore, the necessity of R&D policy is derived from the fact that due to the absence of competitive rivalry in consumption, it is not a pure private good and firms cannot afford excluding unentitled persons from the consumption of R&D work. The application of exclusion principles demands intervention of the public sector, as the owners of inventions (innovations) cannot cope with it for themselves. Still, the public sector intervention for excluding market competition because of the practical absence of rivalry in the consumption of the R&D results in most cases cannot be justified.

It should be checked whether public sector R&D subsidies really stimulate private firms to increase R&D costs (supplement them) or replace (substitute) them (Leyden and Link, 1991; Lach, 2002). Public sector R&D costs increase total social R&D costs when public sector support influences the private sector to provide R&D funds to projects that without the support would not be profitable (Klette et al., 2000; Wallsten, 2000; Jaffe, 2002; Tokila et al., 2008). A threat that public sector support will substitute private sector R&D costs emerges inevitably in cases where the private sector has necessary resources but they are more expensive than those offered by the public sector (Jaffe, 2002; Blanes and Busom, 2004).

2.2 Eliminating system failures

System failures restraining R&D work and the usage of its results can be classified as follows

(Arnold, 2004): *capability failures* – the incapability of research institutions to act derived from bad management, lack of competence, weak study capabilities and other deficiencies; *failures in institutions* – the stiffness of the activities of organizations (universities, research institutes, patent offices, etc.) and thus the incapability to adjust to environmental changes; *network failures* – problems in the relationships of innovation system parties, which are characterized by the shortage of relations or their insufficient quality, the incapability to apply new knowledge and tangling in morally aged technology; *framework failures* – deficiencies in legal institutions, intellectual property protection, health and safety requirements and other background conditions, including social values; *policy failures* (Tsipouri et al., 2008) – deficiencies in the government related to R&D policy development, coordination with other policies and the assessment of policy outcomes, etc.

In order to overcome system failures reducing R&D work efficiency, the public sector must develop an evaluation system for research institutions, systematically direct research institutions to fulfil tasks important for economics, create networks to spread new knowledge and implement counselling programs, but also improve regulatory mechanisms that are important to develop R&D work. Still, it should be taken into account that public sector intervention should be in accordance with the nature and impact of the system failure, the efficiency of resources used should be maximum and regulations should not reduce private sector's initiative and responsibilities necessary for the research work. When considering the rationality of public sector intervention, different public sector failures (the instability of political decision process, the increase of bureaucracy, decision makers' irresponsibility for the results, the possibility of corruption, etc.) must be considered.

The diversity of R&D work means that when designing R&D policy, all institutions and organisations should be directed to cooperate to achieve common objective. This means, creating an institutional environment favouring interactions between organizations. Institutions are defined as the collection of habits, norms, routines, practices, rules or laws that regulates relationships and interactions between individuals, groups and organizations (Edquist and Johnson, 2000). The importance of institutions in guaranteeing the development of innovation is also emphasized by Klun and Slabe-Erker (2009).

3   INTERNATIONAL COMPARATIVE ANALYSIS OF RESEARCH AND DEVELOPMENT POLICY IMPLEMENTATION

3.1   Data and variables used in analysis

In total 32 countries are used in the analysis (27 EU member states, Croatia, Turkey, Iceland, Norway and Switzerland). The statistical data used is from Eurostat on-line database and Community Innovation Survey (CIS) studies. In the current study, data from three years is applied in order to follow the dynamics of different policy aspects. All variables in analysis have been taken from years 2004, 2006 and 2008. Given years have been chosen because for those years all the variables have values available. Several variables come from the CIS study, which is conducted every two years and data from year 2008 is the newest available.

Many theoretical approaches and empirical research (European Commission, 2003; Falk, 2004; OECD, 2005, 2007; Koch et al., 2007; Manjón, 2010) have brought out several variables that describe public sector R&D policy and which can be used to assess the level and structure of R&D policy in different countries. In the current study, the following variables will be used to comparatively assess public sector R&D activities in EU member

states and countries closely associated with EU (see tables 1 and 2). Analysing different variables separately would give fragmented results. In the current analysis, data describing public sector R&D activities are considered as a whole complex taking into account the interconnections of variables.

One of the goals of the R&D policy is to develop R&D activities carried out by the public sector. This aspect is described by first set of variables (see table 1). First four variables describe R&D activities carried out in the public sector. For those variables it must be accounted that not all R&D expenditure in government and higher education sector are financed by the public sector – some of the funding is provided by the business and non-profit sectors, but also from the external sources (mainly EU institutions). Therefore, it is important for each country to bring out those variables that describe R&D expenditure funded by the government sector of that country (variables 5-6). Variable 7 describes government budget – more specifically its share in R&D financing. It is important to note that government budget includes some specific funds acquired from EU institutions, namely EU structural funds that support R&D activities. Last two variables in the table 1 describe the share of public sector R&D personnel in total employment, which describes the supply of work force in public sector R&D activities.

Table 1: Variables describing public sector R&D activities (compiled by the authors)

No	Abbreviation	Variable description
1	GOVgdp	Government sector R&D expenditure (% of GDP)
2	GOVshr	Share of government sector R&D expenditure (% of total R&D expenditure)
3	HESgdp	Higher education sector R&D expenditure (% of GDP)
4	HESshr	Share of higher education sector R&D expenditure (% of total R&D expenditure)
5	GOVtoGOV	Government sector R&D financing from the government sector budget (% of GDP)
6	GOVtoHES	Higher education sector R&D financing from the government sector budget (% of GDP)
7	GBAORD	Share of government budget appropriations or outlays on R&D in government sector total costs (%)
8	empGOV	Share of government sector R&D personnel in total employment (% according to data converted to full time equivalents)
9	empHES	Share of higher education sector R&D personnel from total employment (% according to data converted to full time equivalents)

The second important area of R&D policy is supporting business sector R&D activities. Variables describing public sector support to private sector R&D activities are given in table 2. In different studies, six business sector R&D financing indicators have been used. First two measure the level of government sector financial support to business sector R&D activities. The following four variables are based on the CIS study. Variables 3-6 describe the share of innovative enterprises that received public financial support for innovation activities. The support may be obtained from different levels of government (local or regional authorities, central governments and EU institutions).

Table 2: Variables describing public sector support to business sector R&D activities (compiled by the authors)

No	Abbreviation	Variable description
1	GOVto BESgdp	Business sector R&D financing from the government sector budget (% of GDP)
2	GOVto BESshr	Share of government sector financing in business sector total R&D expenditure (%)
3	funPUB	Share of innovative enterprises that received any public funding (% of total innovative enterprises)
4	funLOC	Share of innovative enterprises that received funding from local or regional authorities (% of total innovative enterprises)
5	funGMT	Share of innovative enterprises that received funding from central government (% of total innovative enterprises)
6	funEU	Share of innovative enterprises that received funding from EU (% of total innovative enterprises)

3.2   The results of empirical analysis

Table 3 shows the statistical parameters of variables describing public sector R&D activities and the level and structure of the public support for private sector R&D activities. The table indicates that the values of variables vary remarkably through EU member states and countries associated with EU, both in absolute (the difference between minimum and maximum levels) and relative terms (the relationship of standard deviation to mean).

Table 3: Statistical characteristics of variables describing public sector R&D activities and the level and structure of the public support for private sector R&D activities[2]

Variable	Mean	Standard deviation	Minimum value	Maximum value	Value in Estonia	Estonian difference from mean (in standard deviations)
GOVgdp	0.20	0.11	0.01	0.68	0.14	-0.54
GOVshr	17.74	12.51	0.74	67.01	12.72	-0.40
HESgdp	0.37	0.20	0.02	0.82	0.47	0.48
HESshr	27.83	11.92	1.23	67.87	43.01	1.30
GOVtoGOV	0.16	0.10	0.01	0.57	0.11	-0.58
GOVtoHES	0.29	0.17	0.02	0.65	0.36	0.41
GBAORD	1.27	0.48	0.35	2.36	1.41	0.31
empGOV	0.16	0.10	0.02	0.52	0.12	-0.39
empHES	0.33	0.14	0.08	0.75	0.39	0.43
GOVtoBESgdp	0.05	0.04	0.00	0.19	0.03	-0.55
GOVtoBESshr	7.74	7.54	0.28	47.00	6.29	-0.20
funPUB	21.17	9.96	4.90	45.79	10.76	-1.06
funLOC	5.80	6.20	0.00	25.73	1.03	-0.77
funGOV	14.52	10.23	1.41	42.78	7.96	-0.64
funEU	6.43	4.22	0.99	19.69	3.53	-0.72

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[2] Values have been calculated as the mean of three years (2004, 2006, 2008).

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Estonian position in public sector R&D activities and in the level and structure of the public support for private sector R&D activities can be seen on chart 1. On the chart, the difference in minimum and maximum values (in standard deviations) and Estonian mean value for each indicator is given. The chart shows that the position of Estonia is the best for the variable *HESshr* (share of higher education sector R&D expenditure in total R&D expenditure) and the worst for the variable *funPUB* (share of innovative enterprises that received any public funding).

Chart 1 indicates that according to variables describing higher education sector R&D financing, the share of higher education sector R&D personnel and government budget appropriations or outlays on R&D Estonia holds a higher position than the average of EU countries. For the rest of the variables describing public sector R&D activities and the level and structure of the public support for private sector R&D activities, Estonia has lower values than the EU average. Therefore, in Estonia the financing of government sector R&D activities, the share of government sector R&D personnel and the public funding for business sector R&D are lower than the average of EU. In Estonia, the main contribution of innovation promotion is expected from the higher education sector and public support for private sector R&D is seen to be rational on a lower level than the EU average.

Chart 1: Estonian position among variables describing public sector R&D activities and the level and structure of the public support for private sector R&D activities

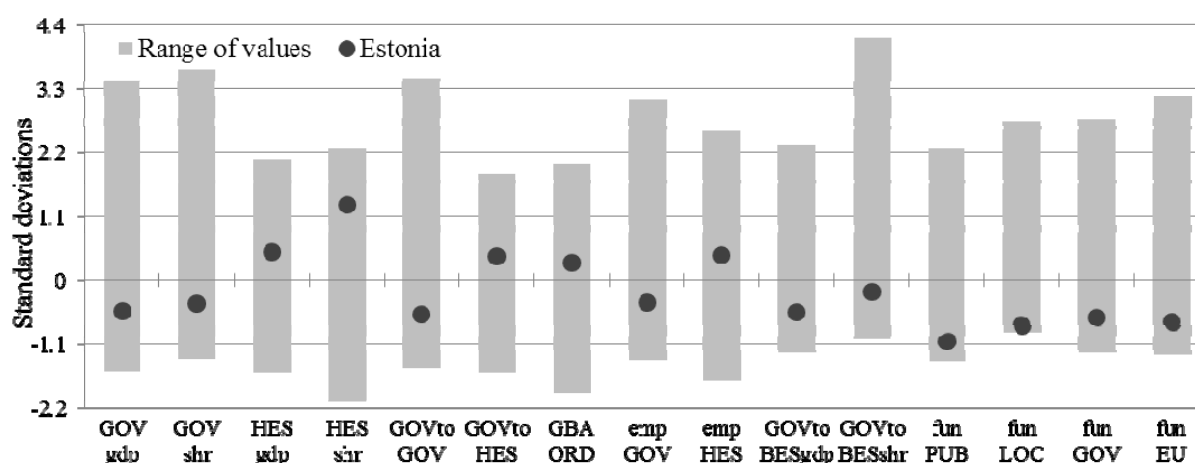Subsequently, component analysis is conducted with the variables describing public sector R&D activities and the level and structure of the public support for private sector R&D activities. The results of component analysis (table 4) show the structure of public sector activities promoting and supporting innovation. Component analysis is based on the correlations in the set of variables.

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Table 4: Component analysis in the set of variables describing public sector R&D policy

	K1 Level of higher education sector R&D financing	K2 Level of government sector R&D financing	K3 Share of central government in financing R&D activities of firms	K4 Level of business sector R&D financing by public sector	K5 Share of EU in financing R&D activities of firms
HESgdp	**0.96**	-0.01	0.07	0.05	-0.03
GOVtoHES	**0.94**	0.02	0.11	0.08	-0.06
empHES	**0.85**	0.06	-0.02	-0.03	0.26
GBAORD	**0.78**	0.23	0.11	0.18	-0.34
GOVshr	**-0.68**	**0.45**	-0.14	-0.10	0.25
GOVgdp	0.10	**0.97**	-0.02	0.09	-0.01
GOVtoGOV	0.09	**0.96**	-0.05	0.10	-0.08
empGOV	-0.06	**0.94**	0.03	-0.13	-0.08
funPUB	0.11	-0.10	**0.96**	0.15	0.10
funGMT	0.09	0.03	**0.94**	-0.08	-0.10
GOVtoBESgdp	0.34	0.22	0.00	**0.83**	-0.08
funLOC	0.25	-0.21	0.27	**0.64**	0.02
GOVtoBESshr	**-0.45**	-0.01	-0.08	**0.62**	0.16
HESshr	0.11	**-0.47**	0.16	**-0.48**	0.28
funEU	-0.10	-0.12	0.00	0.01	**0.93**
Component eigenvalue	4.40	3.49	1.79	1.63	1.12
Cumulative variance explained	29.32	52.61	64.56	75.43	82.87
Significance of Bartlett test	0.00				
KMO	0.63				

Rotation method: Varimax

The component analysis covering the indicators describing public sector R&D policy brought out five independent synthetic complex indicators (components) describing the internal structure of the variables. As the result of component analysis the number of variables describing public sector R&D policy decreased by two thirds (i.e. from 15 to 5), but less than half of the information (variation) included in initial variables was lost (82.9% of the variance of initial variables is explained).

Explaining the nature of synthetic components and giving adequate names for the new indicators is a complicated task. In the current study, the method applied by Karu and Reiljan (1983) is used to explain the economic nature of components as synthetic new variables.

With the first component K1 three variables, that describe higher education sector R&D funding and the share of higher education sector R&D personnel in total employment, are closely connected. In addition, variables that describe government budget appropriations or outlays on R&D and the share of government sector R&D expenditure in total R&D expenditure are strongly connected with the given component. In case of the last variable a reciprocal association exists that explains the crowding out effect of higher education sector R&D funding by government sector R&D funding. The nature of the first component is described with the name "Level of higher education sector R&D financing", whereas the level

of funding also affects the possibility of employing R&D personnel.

With the second component K2 three variables, that describe government sector R&D financing and the share of government R&D personnel in total employment, are strongly associated. With the given component, variables *GOVshr* (the share of government sector R&D expenditure in total R&D expenditure) and *HESshr* (the share of higher education sector R&D expenditure in total R&D expenditure) are weakly associated. The association with the variable *HESshr* is negative, which indicates the substitution of government sector R&D financing by higher education sector R&D financing. This component is characterized by the name "Level of government sector R&D financing".

The third component K3 includes two initial variables that explain the share of innovative enterprises that received funding from the public sector (more specifically from the central government). The nature of the third component is described by name "Share of central government in financing R&D activities of firms".

With the fourth component K4, three variables are strongly associated that describe the level and share of government sector financing in business sector R&D and the share of innovative enterprises that received funding from local or regional authorities. The nature of given component is in the best way explained by the name "Level of business sector R&D financing by public sector".

The fifth component K5 is composed of only one indicator – the share of innovative enterprises that received funding from EU among all innovative firms. That is why this component is explained by the name "Share of EU in financing R&D activities of firms".

Component scores describe each country in the analysis. As each country is represented in the sample with data from three years, there are three component scores for every country. In order to compare countries, they are characterized with the mean of three component scores. Component scores indicate that the structure of public sector R&D policy remarkably varies through countries – countries emphasize different R&D policy areas. To assess the international position of Estonia, a chart illustrating the results is used (see chart 2).

On chart 2 Estonian average positions among the analysed countries are shown using five complex indicators (components) that explain public sector R&D policy in a way that the difference from the mean value and the distance from the extreme values can be seen. When in general Estonia is below the average level of R&D policy implementation, Estonian activities can still be considered balanced – in the case of three components the difference from the average level is smaller than the distance from the extreme values.

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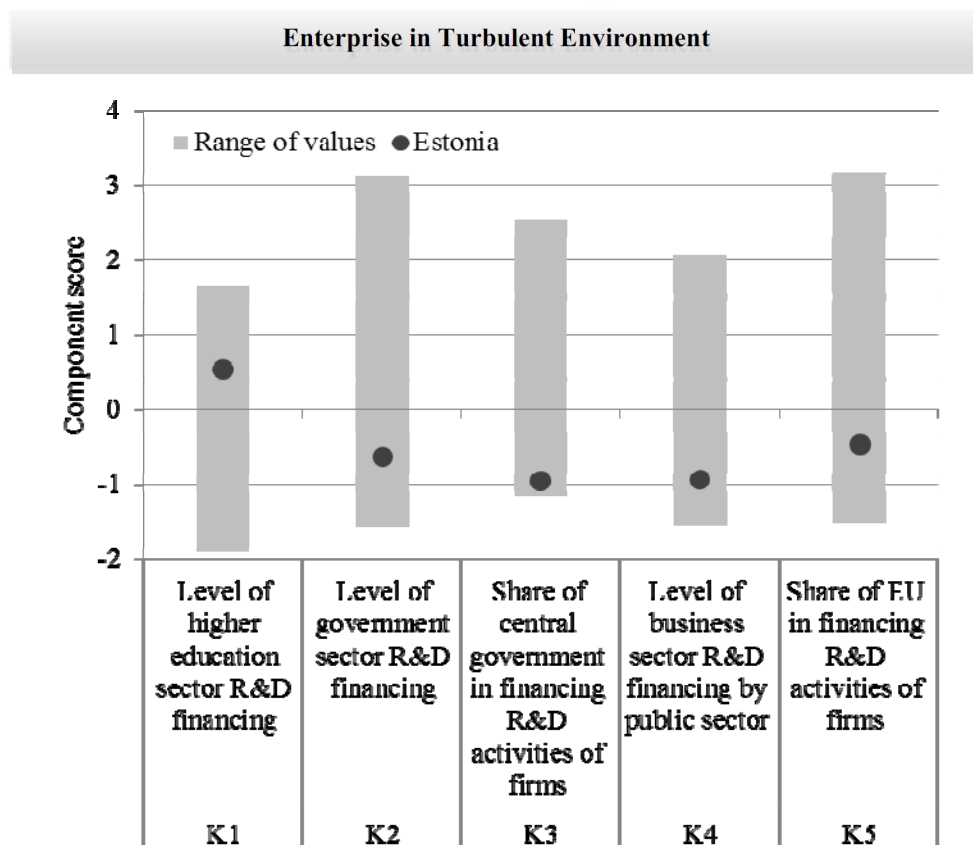
Chart 2: Estonian position among analysed countries using the five components describing public sector R&D policy

According to the component K1 (the level of higher education sector R&D financing), Estonian average component score is higher (by 0.54 standard deviations) than the average of analysed countries and Estonia is situated in the first third among all countries (on the 9th position). Thus, the public sector finances higher education sector R&D on higher level than the European average. This indicates that in Estonia many expectations are set on universities as promoters of R&D. In the case of small open country, it should be considered reasonable as new knowledge should mainly be transferred to specialists through the learning process and this is mostly done by the academics involved in R&D activities. In the case of the first component, the most similar country to Estonia is the Netherlands. The highest component values are in Finland (1.7) and Sweden (1.6), the lowest (negative) values in Romania (-1.9) and Bulgaria (-1.8).

In the case of component K2 (the level of government sector R&D financing), Estonia is by 0.62 standard errors lower than the average of analysed countries and situates on the 24th position. This means that the government sector with its research and scientific personnel does not create remarkable support potential for the business sector and neither is a supportive cooperation partner. In order to find out whether setting such objective would be reasonable at all, it is necessary to study the impact of government sector R&D activities on the business sector. The comparison with other countries offers a few standpoints in this respect. In the case of K2, Estonia is similar to Greece and Denmark. The highest values are in small countries Iceland and Bulgaria (3.1 and 1.6) and the lowest in Malta (-1.6) and Turkey (-1.3). The value of the component K3 (the share of central government in financing R&D activities of firms) is -0.96 in Estonia and it situates on the 28th position in the list of countries – only in four countries the component scores are smaller. The financing of business sector projects by the central government demands enough competence to create long-term innovation policy

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strategies on government level, but also capability to set and solve very specific development tasks to eliminate market and system failures. Profound research is needed to find out the presence of such competence and capabilities in Estonia. Thus, the modesty of Estonia in this R&D field can be considered natural. According to the third component, the similar countries to Estonia are Iceland and Slovakia. The central government supports R&D processes the most in Norway and Cyprus (component scores 2.6 and 2.1), the least in Romania (-1.2), Latvia (-1.0) and Bulgaria (-1.0).

According to the component K4 (the level of business sector R&D financing by public sector), Estonia is situated on remarkably lower level than the average (component score -0.94) and is analogically to the previous component on the 28th position. The low level in that policy field is derived from the fact that Estonia has no regional government level and the local government generally does not have resources and competence to support R&D activities. According to the fourth component, Portugal and Turkey are the most similar countries to Estonia. The highest component scores are in Austria (2.1) and Romania (1.9). The lowest level is in Lithuania (-1.5) and Croatia (-1.1).

Estonian component score for the component K5 (the share of EU in financing R&D activities of firms) is -0.47 and it is situated on the 23rd position among analysed countries. In the given field some deficiencies of Estonian R&D policy must be admitted – namely, the public sector is not able to help the business sector in applying and implementing EU support. According to this component, Estonia is most similar to Bulgaria and Ireland. In this policy field, the best results are in Greece (3.2) and Poland (2.2). The lowest levels are in Luxembourg (-1.5), Turkey (-1.3) and Croatia (-1.1).

When viewing all five innovation policy components together it is revealed that among all analysed countries the best results are in Finland – all five component scores have positive values. The worst results are in Malta – all five components have negative component scores. Estonia is with one over average and four below average values situated on the negative side, but in order to give a specific assessment, more elaborate analysis is needed.

As component analysis includes data from three years, it is also possible to view the dynamics of component scores. On chart 3 the value of Estonian component scores for each year have been given.

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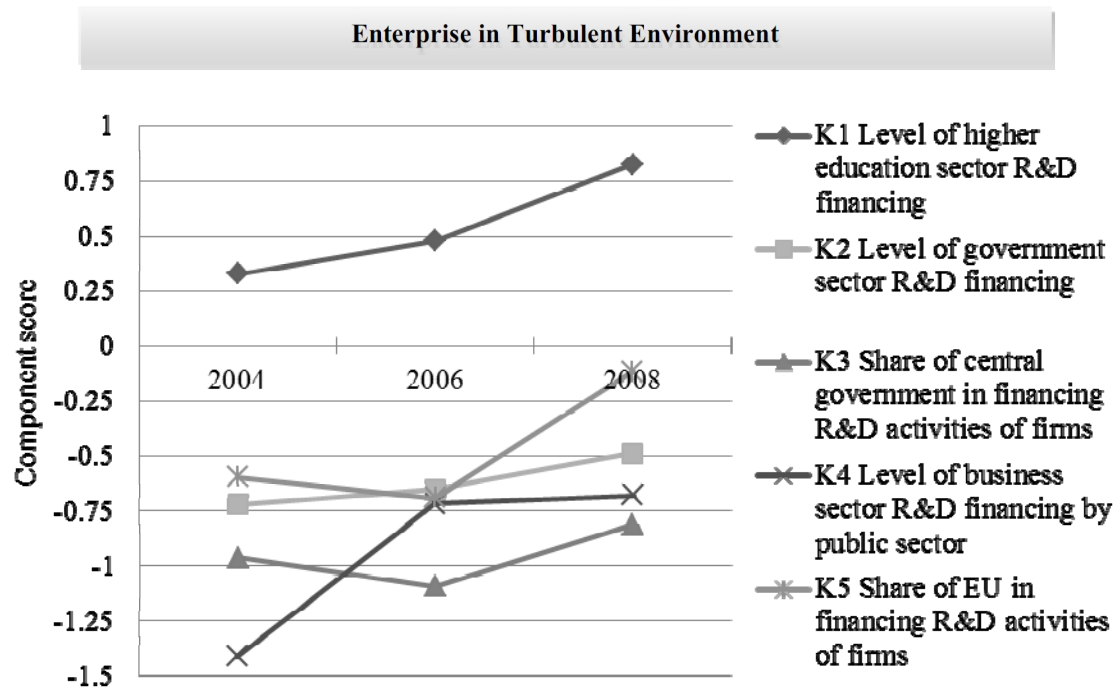
Chart 3: Component scores describing Estonian public sector R&D policy in 2004, 2006 and 2008

Chart 3 shows that for all five components Estonian component scores have grown in time, which means that the position in comparison to the average level of analysed countries has risen. Although in 2006 there was a small decrease in the position (the decrease of component score) of two components (K3, K5), Estonia has considerably moved towards the average of EU countries in the respect of R&D policy implementation. The largest increase has occurred in the value of the fourth component (the level of business sector R&D financing by public sector) and the modest is the growth of the third component (the share of central government in financing R&D activities of firms).

4   SUMMARY

Designing national R&D policy is a difficult task from the aspects of making a choice among the variety of instruments, as well as the several-folded nature of the impact that different instruments create. There are large discrepancies in both R&D policy theoretical and empirical approaches. The current study systematised available theoretical approaches, analysed problems brought out in empirical studies and gave an assessment to the international position of Estonian R&D policy implementation based on the empirical analysis of the dataset of EU member states and countries closely associated with EU.

The reason for public sector R&D policy implementation is to eliminate the market and system failures restraining R&D progress. Market failures are mostly derived from the aspect that from the viewpoint of rivalry, the results of R&D have principally public good nature and the exclusion from the usage of those results is often unpractical. The positive externality of R&D must be taken into account, because the private demand is inevitably lower than the social rational level and with R&D policy measures the demand must be brought to the social utility level. Information constraints do not enable firms to risk with long-term R&D investments and public sector must fulfil the investment gap threatening state development.

Due to the system failure, the cooperation between different parties of national innovation

system does not function smoothly or some institutions and organisations do not fulfil their tasks efficiently. The creation of formal institutions and cooperation organizations promoting R&D development is the immediate responsibility of the public sector. Innovation policy determines the tasks of the R&D policy in promoting innovation in a country and reciprocal connections with the supportive components of the innovation policy (education policy, cooperation development policy and business environment policy).

Still, the intervention by the public sector needs careful analytical justification, as incompetent intervention can distort market processes and shape a R&D policy with irrational scope or structure.

Empirical analysis showed that according to most indicators, that describe public sector R&D activities and the level and structure of the public support for private sector R&D activities, Estonia is below the average level among the countries analysed. Component analysis brought out five dimensions of public sector R&D policy:
- K1 – the level of higher education sector R&D financing;
- K2 – the level of government sector R&D financing;
- K3 – the share of central government in financing R&D activities of firms;
- K4 – the level of business sector R&D financing by public sector;
- K5 – the share of EU in financing R&D activities of firms.

Only in the case of K1 (the level of higher education sector R&D financing) Estonian level is higher than the average of analysed countries, whereas according to other R&D policy components Estonia is below the average level. This is a somewhat expected result, as in the case of a small open country external sources are considered important for obtaining innovative knowledge.

Although the position of Estonia according to most components describing public sector R&D policy is relatively modest, an important progress has occurred during the four year period (2004–2008) and Estonia has become remarkably closer to the average level of EU member states and countries closely associated with EU. After the CIS data is published for year 2010, the impact of world economic and financial crisis on Estonian public sector R&D policy can be analysed.

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INSURANCE COMPANIES' SOLVENCY CHALLENGES IN SMALL TRANSITIONAL COUNTRIES

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ABSTRACT
Solvency measurement is definitely one of the most sensitive actuarial tasks of an insurance company. Its specific importance does not change if we discuss life, health, non-life or pension insurance. Also, in each of the previously mentioned insurance types, solvency is one of the most relevant indicators. In insurance companies, solvency is being determined by different indicators which depend on the solvency regime that is being applied to a specific economy. Also, different approaches are used in USA, Switzerland and the European Union. This paper is focused on the EU regime being applied in small transition countries. The comparison with other relevant systems will be provided as well. It took some time for the current EU Solvency I regime to be appropriately adopted by all countries required to implement the system. Initially, the implementation of Solvency I was a challenging issue, but it is history now for most developed countries. Unfortunately, we cannot say the same for the transition countries. As a logical consequence of the financial sector transition over the last decades, the European Union financial authorities were trying to define a new, better solvency assessment system to be adopted in most of the Union countries. That procedure officially started in 2006 and is still pending. All EU members will be obliged to implement the system, at least its standard part. All more sophisticated measures are left for the countries' insurance companies and/or supervisors to decide on whether to implement them or not. When discussing the developing countries, that are knocking on the EU door, the insurance directives implementation possibilities is one of very important questions. Given the importance of small countries' stabilization and association procedures, the financial sector is one of its key elements. When it comes to insurance, solvency measurement is currently the most challenging part of it. Challenges are many and the most demanding ones pertain to the lack of data, inappropriate knowledge and continuous education. Also, the supervisors are not aware of their importance in the whole process. The survey concluded between actuaries in insurance companies has also identified some other important issues which are to be elaborated in the further course of the paper. The paper aims at making a clearer comparison between the relevant solvency regimes and the measures. In addition, the key challenges of the implementation of the EU regime in the small transition countries, considering the small countries characteristics and the solvency measurement complexity, will also be elaborated.

Keywords: *Actuarial science, Solvency, SOLVENCY I, SOLVENCY II, Transitional countries*

1 INTRODUCTION

In the middle of the last century, solvency was given more serious consideration for the first time. The first specific proposals were sublimated into the first three generations of the Life Insurance Directives (effective until 2002 –Solvency 0). In 2002, the approach became slightly innovated, however, no radical changes (Solvency I) were introduced. At the

beginning of the new century, it was found that the previous approach to the solvency treatment was outdated and that, as the global experiences dictated, it was necessary to develop a new approach (which, at the time, already existed in USA, Japan, Switzerland). The new approach made a radical step forward from the scope of financial elements (which, under certain circumstances add to the value of the solvency margin) to the risk-based approach (where the solvency margin results from an individual risk assessment to which the insurer has been exposed.

Therefore, the path of the solvency assessment for life insurances will be presented in the further course of the paper. The starting point is the assessment based on simple parameters, factors and formula which used to be applied to the accountancy data (after adjustments of the amounts communicated for reinsurance). Specifically, with regard to life insurances, the base depended on who bore the risk of investments. The survey and a critical review will be finished applying a new, risk-sensitive approach to measuring the insurer's financial stability. Such a radical change is aimed at securing a better protection of insurers and their funds, wherein the supervisor will dispose of better tools, techniques and methods for the assessment of the insurer's credit worthiness.

Regardless of technical changes of the method for determining the solvency margin, all of the foregoing approaches have several features in common (IAIS Sun-Committee on Solvency and Actuarial Issues, 2000; referenced by ChandraShekhar, Kumar and Warrier, 2008, p. 2):
- any approach implies "a minimum solvency requirement" or "a required minimum margin" – this being a minimum amount of surplus of the insurer's assets over his liabilities;
- apart from the minimum amounts, the insurer maintains the amount of the "available solvency margin" as well, which is primarily used for the financial statements to the regulatory institutions and which constitutes the amount of free capital and, as an absolute value, it must be the amount greater than the required minimum solvency margin;
- any approach defines the control level, which is the minimum permissible amount of assets where there is no intervention by the regulatory institution;
- solvency testing also implies any approach, implicitly or explicitly, and testing of amounts and their harmonisation with the principles set down is understood.

The European Union (European Economic Community at that time) first Directives were published in the '70-ies of the last century. The first Directive regulated life insurance and was publicised on 5 March 1979, while the first Directive which regulated non-life insurance was publicised earlier, that is, on 24 July 1973. These two Directives were the first steps towards the establishment of the EEC single insurance market. Among other things, the text of the Directive also included specific determinants the companies had to satisfy to be considered solvent. Such requirements were based on the 1961 work authored by C. Campagne. One of the more significant issues which also caused disputes among the EEC member states related to whether the insurance companies should be allowed to deal with both life and non-life insurance (in other words, was the establishment of composite companies permitted). Such debates caused a gap of almost 6 years between these two first directives regulating the solvency issues concerning life and non-life insurance. Three directives were produced for the respective areas of life and non-life insurance each.

During the implementation of the life insurance third Directive, the Council of the European Communities looked into the possibility of revising the technical provisions and the assessment of adequacy of solvency margin. Considering that the previous Directives were aimed at unifying the rules, thus making a step forward towards a single insurance market, a decision was made for any further correction, in the context of the rules, to be made so that the currently effective rules are not radically changed. Radical changes should be thoroughly examined, harmonised with all levels and then applied. The basic corrections relative to the previous regime pertained to specifying the quality of the available solvency amount and solvency margin required for unit-linked products.

These contemplations were the introduction into the development of a new model of the insurer's solvency assessment - Solvency I system, which is the assessment system applicable even nowadays.

2   SOLVENCY I

In cooperation with the Commission of the European Communities, the Council of the EEC decided to produce a report on the current situation of solvency and offer recommendations for possible changes. The report was supposed to be presented to the Insurance Committee within three years as of the date of implementation of the previous rules (in the Life Insurance Directive, specifically Article 26 which regulates the solvency margin issue). During 1994 (almost two years after the implementation of the Life Insurance Third Directive), the Insurance Committee raised and issue of revising the methods and techniques for the assessment of an insurer's solvency. A conclusion was made for the top level insurance supervisors to be involved in rendering the new rules. Such initiative resulted in the establishment of a Working Group which was led by Helmut Müller, German supervision representative. In 1997, the Working Group presented to the Insurance Committee a report titled the Müller's Report.

In general, the activities on revising the assessment of the adequacy of technical provisions and solvency margins were at that time split to two parts. One part of the Commission worked on the Solvency I processes – which implied revision of the current determinants in accordance with the recommendations in the 1997 Müller's Report. The other part of the Commission worked on the development of a brand new approach to the solvency assessment - Solvency II.

Analyses that followed the Müller's Report and covered the period from 1997 to 2001, included many associations of insurers, actuaries and supervisors. A conclusion was rendered that the current solvency assessment system was adequate, but for a short period of time. Considering the risk escalation, a reservation was attached to the claim that the solvency assessment system would be adequate in several years. Even at that period of time some countries developed or were engaged in developing a risk based (thus being risk-sensitive) system for assessment of insurer solvency. Such considerations opened a path for the development of some new ideas to be articulated in the Solvency II Directive at a later point in time. Until that time, a new Directive proposal, that is, a Proposal for a Directive of the European Parliament and of the Council amending Council Directive 79/267/EEC as regards the solvency margin requirements for life insurance undertakings, was produced in 2000.

Two years later, on 5 March 2002, the European Parliament adopted new Directives on solvency of insurer's life and non-life insurance. The life insurance Directive was titled the

Directive 2002/12/EEC of the European Parliament and of the Council amending Council Directive 79/267/EEC as regards the solvency margin requirements for life assurance undertakings. After several months, on 5 November 2002, this Directive was replaced by a new one titled the Directive 2002/83/EEC of the European Parliament and of the Council concerning life assurance.

In late 2000, the first 2002/12/EEC Directive was replaced by a 2002/83/EEC Directive which was effective at the time of writing this document as well. The 2002/83/EEC Directive is more comprehensive, with its eight parts and 74 Articles. It regulates the following areas:
1. Definitions and scope (Articles 1 through 3);
2. The taking-up of the business of life assurance (Articles 4 through 9);
3. Conditions governing the business of assurance:
    3.1. Principles and methods of financial supervision (Article 10 through 19);
    3.2. Rules relating to technical provisions and their representation (Articles 20 through 26);
    3.3. Rules relating to the solvency margin and to the guarantee fund (Articles 27 through 31);
    3.4. Contract law and conditions of assurance (Articles 32 through 36);
    3.5. Assurance undertakings in difficulty or in an irregular situation (Articles 37 through 39);
4. Provisions relating to right of establishment and freedom to provide services (Articles 40 through 50);
5. Rules applicable to agencies or branches established within the Community and belonging to undertakings whose Head Offices are outside the Community (Articles 51 through 57);
6. Rules applicable to subsidiaries of parent undertakings governed by the laws of a third country (Articles 58 and 59);
7. Transitional and other provisions (Articles 60 and 61);
8. Final provisions (Articles 62 through 74).

Considering the basic subject of this paper, Title 3 (Chapters 2 and 3) is in our focus. The referenced parts of the Directive address the technical provisions, the solvency margin and guarantee fund.

Technical provisions in life insurance under the Directive 2002/83/EEC have thoroughly been explained in Articles 20 through 26.

Every insurance company is required to establish sufficient technical provisions. In case of life insurance, this primarily refers to mathematical provisions. Other possible forms of technical provisions (transferrable premium) are usually presented within mathematical provisions. The amount of the technical provisions should be calculated in compliance with several basic determinants.

Calculation of mathematical provisions should be made by applying prudent actuarial prospective calculation methods. In the process, all future liabilities of the insurer (established based on the signed insurance contracts, wherein every individual contract should be studied analytically) should be taken into account. Apart from the liabilities established in a manner that the payments of the insured sums are in the focus, all guaranteed profits, surrender values, bonuses and expenses of the insurer should make a basis for calculation of the amount

of the provisions. Although the application of the prospective method is recommended, using the retrospective methods is also allowed in the following two cases: if the prospective method cannot be applied due to the specific nature of the contract, and if the retrospective method does not result in lower technical provisions than the prospective method. Prudent validation methods do not imply the determination of the best assessment. The methods for the assessment of technical provisions should be adequately selected and reliable, but only for themselves. These methods must follow those of the same features (in the context of the assets safety) by which the assets to be used for covering the technical provisions are validated. The assessment of the technical provisions or, more accurately, mathematical provisions must be calculated separately for every contract and by using the individual methods. The Directive also allows that the group methods may be used but only when the verification shows that the group methods lead to the approximately same results as those obtained when using individual calculation methods. Naturally, it is recommendable in both cases that additional provisions should be created for the unpredictable risks. Where the surrender value of a contract is guaranteed (under the conditions defined in compliance with the tariff and the insurance conditions), the amount of the mathematical provisions for the contract at any time shall be at least as great as the value guaranteed at that time.

Another important determinant pertains to the **method for interest rate determination**. Interest rate should be selected very carefully. Interest rate is a part of the actuarial tables which, along with the statistically balanced probability of mortality, numbers of alive and dead persons, expected and average lifespan, make a basis for the risk quantification. The rules for selection of interest rate which, for the purpose of the actuarial tables, is transformed into the discount rate, are defined by the respective national supervisors of all member states. Evaluating the amount and features of interest rate, the national supervisor should take into account the following elements. It is necessary that the supervisor identifies for all contracts one or several rates to which the actuaries of the insurance companies should adhere. If the life insurance contracts imply certain interest rate guarantees, the regulator should identify a single national economy rate provided that it is not more than 60 % of the rate on bond issues by the government of that national economy. In addition, when the assets are not valued at their purchase price, the supervisor may stipulate that one or more maximum rates may be calculated taking into account the yield on the corresponding assets currently held, minus a prudential margin. The amount of rate is established at the adequate level (which is a maximum allowed rate of interest), but it does not imply that the insurance companies are bound to use a maximum rate. The insurance companies may decide not to comply with the provisions determining the interest rates as stated, but only in some cases. The deviation is allowed in the case of the unit-link contracts (the contracts directly linked to the investment results, wherein the insurer bears the investment risks), single-premium contracts (for a period of up to eight years) and without-profits contracts, that is, annuity contracts with no surrender value. Under no circumstances may the rate of interest used be higher than the yield on assets. If, during the insurance company business the yield is deducted, the insurer company should cover the costs from its own reserves. The interest rate chosen should be transparent.

Statistical elements of **valuation and allowed expense loading** should be selected carefully, taking into account the type of contract, duration, administrative fees and the anticipated acquisition costs.

For the contracts which imply the **participation in profit,** the method of calculation for technical provisions should take into account, either implicitly or explicitly, future bonuses (in a manner consistent with the other assumptions and expected distribution of profit).

All **expense loading elements** should be determined carefully and presented either implicitly or explicitly. It is necessary that the expenses defined to be an integral part of the tariff be consistent with the insurer's anticipated expenses.

The methods selected for calculation of technical provisions should be consistent for many years. Changes of the calculation bases and methods applied are not permitted.

The insurance companies should pay due attention to data transparency. To this end, bases and methods used for calculation of mathematical provisions and provisions for bonus should be available to the public.

Tariffs created for the insurer's new products should be defined under the reasonable actuarial assumptions at the level enabling that the insurer's liabilities may be satisfied and the adequate technical provisions created at all times.

Technical provisions must be covered by the insurer's assets. The assets must be selected so that they suit the type of the product (which constitutes a mathematical provision) and provide security, refund and marketability of the investment. The Directive clearly specifies the categories of assets which may cover the technical provisions: investments, loans and others. Each category has several sub-categories (Directive of the European Parliament and of the Council concerning life assurance, 2002/83/EEC, 2002). The categories of assets are rather generally defined. As usual, the EU Directives leave to the member states to develop a detailed list of assets which may be used for covering the technical provisions. In general, all assets which were decided to be used for covering the technical provisions should be validated under the net principle and assessed in a prudent manner. Loans may be used as cover, but only if secured. If there are derived financial instruments in the market, which may contribute to certain risk reduction, they may be used for covering the technical provisions. Financial instruments which are not subject of trade at the organised markets, may also be used for the foregoing purposes, but only if their solvency is at a high level. If the insurer has debtors, these loans may be used as security but only when all possible claims of the debtor against the insurers are deducted from those amounts. Deferred acquisition costs may be accepted as the instrument for covering the technical provisions, but not beyond the amount of the rate applied to the calculation of mathematical provisions.

The investment rules are set down in percentage for some parts of technical provisions. Certain percentages may not be exceeded (except in special cases and with a written consent by a supervisor).

Apart from quantitative restrictions, the invested assets must satisfy some other additional conditions which comply with the basic characteristics of life insurance as business, the nature of the assets being invested and the market characteristics.

Like in the previous Directives (first three Directives about life insurance within the Solvency 0 system) a distinction has been made between the available solvency margin – ASM and the

required solvency margin – RSM. Furthermore, it also foresees that the insurer maintains the guarantee fund.

Apart from the amounts of the available solvency margin and the required solvency margin, the solvency ratio is a standard indicator of the insurer's financial quality. The solvency ratio will be calculated by using the following formula:

$$SMR = \frac{TSM}{\frac{1}{2} \cdot TR} \cdot 100 \qquad (1)$$

wherein
SMR - solvency margin ratio (expressed in %)
TSM - total solvency margin
TR - total risk
This control indicator is most frequently used by supervisors in their assessments of the insurers. The formula used in all countries and systems has the same logic, however, various types of risks are taken into account. The example of the solvency ratio calculation by the Japanese supervisors is presented below.

Depending on the result of the previously defined solvency ratio, the Japanese Regulator has developed an action scale. Legal minimum of solvency ratio is 200%. If the value is ≥200%, no steps whatsoever will be taken.

Table 1: Solvency Margin Ratio and action thresholds (Topics in Life Insurance Industry, 2010)

Category	SMR	Actions
Not categorised	$SMR \geq 200\%$	No actions to be taken
Category 1	$100\% \leq SMR < 200\%$	Development of a business promotional plan
Category 2[1]	$0\% \leq SMR < 100\%$	a. Development and implementation of a plan to secure solvency b. Banned or restricted payment of dividends c. Banned or restricted payment of bonuses to the policy holders d. Changed premium calculation method for new contracts e. Banned or restricted payment of bonuses to managers
Category 3[2]	$SMR < 0\%$	Partial or total business suspension for a temporary period of time

The prescribed method has been amended and it should be stated that, from the perspective of the Directive Solvency I, the total amount of risks may be calculated by using these methods (Stochastic measure referring to Solvency II) or determining measures.

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[1] If the value of net assets of the insurer in this category is negative, the insurer shall be placed under category 3.

[2] If the value of net assets is positive, regardless of SMR<0%, the insurer may be placed under category 2.

3   SOLVENCY II

One of the first documents that highlighted urgent need for changes of the current system was the one referring to the principles of assessment of capital adequacy and solvency, titled the Principles on Capital Adequacy produced by the International Association of Insurance Supervisors - IAIS in 2002.

The IAIS document contains the following 14 principles required for the capital adequacy assessment:

- Principle 1: Technical provisions – have to be adequate, reliable, objective and allow comparison across insurers;
- Principle 2: Other liabilities – Adequate provisions must be made for all other liabilities insofar as they are not included in the technical provisions;
- Principle 3: Assets – Assets have to be appropriate, sufficiently realisable and objectively valued; it is quite certain that there is a need to create provisions to allow for concentration risk, credit risk, market risk, liquidity risk and liquidation risk;
- Principle 4: Matching – Capital adequacy and solvency regimes have to address the matching of assets with liabilities. The capital adequacy and solvency regimes should address the risk of loss arising from mismatches in the currency, timing of cash flows and amount of cash flows, of the assets and the liabilities of the insurer adjusted to take account of off-balance sheet exposures;
- Principle 5: Absorption of losses – Capital requirements are needed to absorb losses that can occur from technical and other risks; risk of error, reinsurance risk, operating expenses risk, special technical risks (liquidation risk and the risk of excessive or uncoordinated growth), operational, market, organisational and conglomerate risks, and investment risks (depreciation, liquidity, interest rate);
- Principle 6: Sensitivity to risk – Capital adequacy and solvency regimes have to be sensitive to risk – which implies valuation of liabilities (including technical provisions), requirements on assets (including requirements for valuation of assets), definition of appropriate forms of assets (capital in particular) and determination of required solvency margin;
- Principle 7: Control level – a control level is required;
- Principle 8: Minimum capital – a minimum level of capital has to be specified;
- Principle 9: Definition of capital – capital adequacy and solvency regimes have to define the suitable form of capital;
- Principle 10: Risk management – capital adequacy and solvency regimes have to be supplemented by risk management systems; these risk management systems have to be comprehensive and cover all risks to which the insurer is exposed; the required solvency margin has to be considered the last resort in case of considerable losses and undermined financial stability of the insurer;
- Principle 11: Allowance for reinsurance – reinsurance policy should consider the effectiveness of the risk transfer;
- Principle 12: Disclosure – The capital adequacy and solvency regime should be supported by appropriate disclosure;
- Principle 13: Solvency assessment – Insurance supervisory authorities have to undertake solvency assessment;
- Principle14: Double gearing – in case of membership in a group, capital adequacy and solvency regimes should be adequately implemented.

In the context of implementation of the Lamfalussy approach, an important step forward has been made towards harmonisation of the EU processes.

It has been inferred that the system on which Solvency II is based has been taken over from the banking business operation which is envisaged by Basel II system and which consists of three pillars.

Pillar I covers quantitative requirements, i.e. the rules for calculation of certain values (primarily technical reserves and investments). According to the principle of caution, insurer's capital requirements are followed up through three categories: aimed capital, necessary amount of capital and absolute minimum capital.

Pillar II pertains to the supervision process and sets out clearly defined internal control and risk management rules.

Pillar III sets out market discipline, in particular transparency requirements and accounting rules harmonization.

Phase 1 Solvency II was a phase devoted to extensive research and scientific work. The objective of Phase 1 was to collect as many opinions of the EU relevant authorities in the field of insurance as possible in order to provide a sound basis for setting up a new system. The search for possible solutions partly continued in the second phase, while the roadmap for the new directive has been presented at the Insurance Committee session held in June 2004. With the introduction of the new idea, the Insurance Committee sought assistance and advice from EIOPA, more specifically in April and December 2004 and in the spring 2005, when the updated version of the Directive was presented.

The conclusions and recommendations can be directly linked with the structure and the three pillars of Solvency II. The Pillar I recommendations apply to two levels of capital requirements, as follows:
- solvency capital requirement – SCR – the amount that should reflect the level of the economic capital with which the insurer can settle its obligations without disturbance and with the minimum loss occurrence likelihood. This level should identify most of the risks to which the insurer is exposed and should be the basic instrument for the supervision process. The new system, except for standard formulas, will make it possible for insurers to develop internal models for the SCR calculation.
- minimum capital requirement – MCR – or security margin that should be created so as to constitute the main signal for necessary supervision. The MCR should be calculated by applying simple and objective methods, considering that in case of the supervisor's intervention, where the insurer does not conduct business properly, the case may end up before the court, so the calculation method should be kept simple and comparable in different jurisdictions.

In addition to capital requirements, Pillar I also covers technical reserves treatment and defining of the level of intervention.

The Pillar II recommendations were just the elaboration of the previously mentioned idea. Specifically, with a sound quantitative background, the national economy should have a sound supervision system. A proposal has been made to harmonize certain supervision

procedure components, such as: internal control principles, risk management, finance management, harmonization of assets and liabilities and re-insurance criteria development. All risks that are not quantified in Pillar I are taken into account and assessed in Pillar II. A proposal has been made to set the on-site minimum control criteria, define the supervisors' authorities and responsibilities and require transparency of the activities.

The Pillar III recommendations pertain to data transparency and publication. It has been inferred that it is necessary to develop a uniform reporting system.

The SCR constitutes the level of capital required to ensure that the insurer will be able to operate its business without disruption and with minimizing the loss occurrence likelihood. The directive implies that the prospective calculation quantifies a risk-sensitive amount at the level which shall be adequate information to the supervisors on the potential need for their intervention. Considering that the primary objective of the directive development and implementation is harmonization of directives, this type of regulation should be harmonized in member states with their local regulations.

In addition to the SCR Directive, Solvency II also stipulates the calculation of another capital requirement – risk margin. The best assessment of the insurer's liabilities is used for the SCR calculation. The approach developed on the cost of capital is used for the calculation of risk margin. The approach based on the cost of capital is recommended by the Directive and it takes the future SCR value as the basis for calculation.

The best estimate of the insurer's liabilities shall be calculated gross from amounts recoverable from re-insurance (without deduction of the liabilities to re-insurers), while the cost of capital with risk margin is calculated after deducing liabilities for re-insurance (i.e. net re-insurance). The risk margin is calculated for all types of insurance (as specified by the Directive), and only for the types where hedging, as alternative to some risks, is not possible (in most instances, this is the case with life insurance).

According to the Solvency II provisions, MCR is the amount of the capital which constitutes the lower capital threshold of which the insurer disposes. If the amount of the available capital approximates the calculated MCR or drops below that value, this is an alarming sign to the supervisor to intervene.

The MCR calculation is based on technical reserves and risk-free sums (not on the risk as is the case with SCR), but the risk-margin is not taken into account.

Table 2: Factor values for specific types of insurance (CEA, Insurers of Europe, 2006)

The table below sets out the general main differences between the two systems:

	Solvency II	Solvency I
Valuation of assets	Market consistent value	Market/accounting value
Valuation of liabilities	Market consistent value	Methods are not harmonized, but the security margin falls within technical reserves
Available capital	Holistic balance sheet approach	Partly in use
Diversification	In use	Not in use
Risk mitigation	In use	Partly in use
Solvency control levels	SCR and MCR	One level determined by the supervisor
Insurer groups	Recognized	Partly recognized
Calibration	On economic basis with the use of market and historical information and experiences	Subjective and usually does not correspond to specific traits of the insurer

4 SOLVENCY IN BOSNIA AND HERZEGOVINA

Current legislation which defines solvency assessment of insurance companies in Bosnia and Herzegovina is drafted on the level of Entities.

Solvency in the Federation of BiH is defined under a by-law – Rulebook on the Elements and Control of the Solvency Margin[3], issued by the Insurance Supervision Agency of the Federation of BiH. In addition to the Rule Book which defines the issue of solvency in FBiH, calculation of mathematical reserve is also defined as an essential element, which is a step before calculation of solvency margin. Calculation of mathematical reserve is also explained in another Agency's by-law - Criteria for Mathematical Reserve of Life Insurances and Other Insurance Types that Are Subject to Calculation of Mathematical Reserve (published together with the previously mentioned Rule Book).

In the Republika Srpska, the same matters are defined under the Rulebook on the Elements and Control of the Solvency Margin of the Insurance Companies in the Republic of Srpska[4]. In 2012, the RS started to prepare new by-laws - Draft Rule Book on the Elements and Control of the Solvency Margin and Draft Rule Book on the Calculation of Capital and Capital Adequacy of Insurance Companies.

Everything said and explained before pertains to the model of solvency assessment currently applied in Bosnia and Herzegovina. We have earlier mentioned the laws and by-laws which provide a legal framework for such calculation and explained it by giving an example of an existing insurance company. Also, we have given an example of life insurance calculation pattern. Specific details about the Insurance Company have not been provided, since the information contained in the calculation of the mathematical reserve and solvency margin are considered to be a business secret.

Solvency margin assessed in this way corresponds to the Solvency I concept. One of the input elements used in the calculation is the mathematical reserve (its gross and net amounts).

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[3] The Rule Book was published in the Official Gazette of the Federation of Bosnia and Herzegovina No. 80/06.

[4] The Rule Book was published in the Official Gazette of the Republika Srpska, No. 101/07.

Mathematical reserve, *per se,* is the value of compound interest of the investment portion of the premium and directly includes only a population death risk (when pure life insurance policies are concerned). Where calculation involves joined health insurance policies, morbidity tables are also taken into account, which means that a disease risk is included. A new concept, Solvency II, requires broadening the scope of risks which are included in the calculation. It is considered that the mere quantification of a death risk is not sufficient to secure the amount of capital which would ensure company's solvency. Therefore, the scope of risks has been broadened so that the calculation now includes: Contract risks: risk taken under the life insurance contract, biometric risk, buy-out risk, policy expiry risk, costs risk, Market risks: risk of discrepancy between assets and liabilities, Credit risks: concentration and reinsurance risk, Operational risks.

The life insurance module that is in the focus of this text involves the following risk sub-groups:
Contract amendments, Mortality, Longevity, Disability, Contract expiry (revision), Expenses, Catastrophes.

Insurance sector in Bosnia and Herzegovina has shown slight increase in the recent years, despite the overall crisis. Life insurance markets, as a part of industry which is in the focus of this text, show a growth trend, however, since the basis is relatively low, the growth rate is still considerably lower than it could be expected at a developing market. Reasons for such a slow development could be found in many areas of life, but it would be sufficient to mention low domestic purchasing power, absence of insurance tradition and culture, lack of awareness of the need for insurance and benefits thereof, and the lack of confidence in industry.

Notwithstanding the perception of the public, insurance sector actively follows European standards in some segments. Earlier in the document, we attempted to outline the European standard and the possibilities and limitations of its application to the Bosnia and Herzegovina market. In a string of different rules that Europe imposes to the insurance business, the focus is on the Solvency II directive, which defines regulations, methods and techniques in calculating solvency margin and insurer's capital adequacy (preceded by a series of pre-calculations).

In addition to assessing the possibility to apply the explained models, which remained theoretical in absence of appropriate information that could be used to properly test the mentioned models, a small-scale insurance market research was conducted with the aim to show how the industry sees the new system. Questions were posed to the actuaries who are lead experts in their companies and thus best suited to give answers and their opinions about these issues.

Based on the answers provided by actuaries of ten Companies in Bosnia and Herzegovina, it can be concluded that companies are only partly aware of all challenges they will have to face in the process of adaptation and implementation of the new system. It is also clear that all companies still do not see Solvency II as a close future, so that they take a relatively serious approach to resolving this problem. On top of that, the regulatory authorities in both entities in Bosnia and Herzegovina currently do not provide much support. The regulatory authorities have not yet devised either plans or guidelines which would help insurance companies to adapt to the new system and better prepare for new solutions. Companies are aware of the problems resulting from absence of information and insufficient knowledge and competence

in this area. This is not such a big problem for companies with mixed (international) ownership, because in both situations they will rely on their mother companies in the European Union who had to solve those problems earlier. Domestically owned insurance companies will encounter more problems with the data, given that neither the Federation of BiH nor the Republika Srpska have adequate data bases. Moreover, the knowledge and skills needed to master new solutions will have to be found by engaging external consultants.

One of the major limitations in application of internal models (integral ones or only certain modules) is the size of the market. It can be hardly expected that a market this small with disorganized statistics, as is the BiH market, would provide any realistic opportunity to assess the impact of some of the risks on the market, specifically those risks considered as relevant by insurance companies. In addition to sophisticated knowledge and skills that are necessary for devising an internal model, insurance company must possess highly precise and detailed information.

We can conclude by noting that insurance companies in BiH will have to apply the new system, but obviously that will not happen in the close future. Here lies the reason why insurance companies and regulatory authorities still do not attribute much attention to the issues relevant to Solvency II.

Implementation of the new system will be possible once all interested parties take real action in furtherance of this goal, when they start finding adequate solutions, draft documents and work towards the implementation. Until then, we will be left to discussing limitations only.

5   CONCLUSION
According to the existing legislation in Bosnia and Herzegovina, solvency assessment system is based on Solvency I assessment system. Current system does not incorporate all the mentioned risks, nor does it foresee a sophisticated quantification. Nevertheless, the Bosnia and Herzegovina market will be inevitably affected by those developments.

There is no doubt that Bosnia and Herzegovina will have to adapt to EU processes in the future, in this case, those are directives for insurance sector. Undeniably, harmonization with Solvency II is ahead, but it will take a lot of effort.

The research showed that insurance companies in Bosnia and Herzegovina do not possess a systematic body of information and knowledge of the new system. It follows from the provided answers that a lot of things have been done *ad hoc*, lacking a thorough, scientific and expert approach. Companies partly have preliminary documents (first level documents) that can be used for preparatory activities, but they by no means can be taken as a serious road map for the future. Companies in Bosnia and Herzegovina have to develop their own strategies of introducing Solvency II, in accordance with their own vision. In the questionnaire, insurance companies referred to the strategies devised by their big mother companies, however, they could be used as guidelines, but not as a final solution for insurance companies whose business is in BiH. When assessing possibilities and limitations of the implementation, local companies should assess all external and internal factors which directly and/or indirectly affect the possibility of implementation (primarily limitations and obligations defined by law, characteristics and particularities of the market, availability of information, staff qualification). There is no analysis conducted by official authorities about the degree of incompatibility between current solutions and new requirements,

notwithstanding that such a document would provide good guidelines to insurance companies. Should regulatory authorities express a clear interest, companies would certainly notice it and take a more active approach. Current behavior of regulatory authorities undeniably leaves insurance companies with the impression that the new system does not bring vital changes in the calculation segment (which is completely wrong). On the other hand, the majority of companies are aware that additional training of employees is necessary. At the initiative of regulatory authorities, the forthcoming period should be used to raise awareness of the role and importance of the new assessment system. This process is unavoidable, so that it would be vitally important to start its implementation promptly and without any delay since insurance companies and regulatory authorities would have more time to make necessary adjustments, which are prerequisite to arriving to better final solutions.

With regard to the technical aspect of the new solutions, it can be concluded that insurance companies think about the new concept, but very little has been done in its implementation. Companies are mainly aware of the problems associated with the new system, but actuaries are those who know most about the implementation and details thereof. The fact is that actuaries bear most of the responsibility in this respect, but they also possess the most specific knowledge needed to implement this system. It should be noted at the same time that actuaries are not the only persons in companies who are interested in this business activity. It would be impossible to properly implement this new system without personnel from other departments like insurance security, accounting, risk management and company management (who should show understanding and give support to future work).

The forms that are used in the standard model by insurance companies in BiH to quantify risk do not show the data necessary for such risks quantifications. The only available information can be taken from the last 1991 census in BiH. Considering all demographic changes which took place from 1992 to 1995 and afterwards, one can be sure that currently available information does not provide a valid basis for risk quantification. In absence of such information, risk is approximately quantified on the basis of old mortality tables (1980–1982) or international companies use tables of the countries in which their mother company is registered (mother companies from the EU). Therefore, there is hardly any official information about, for instance, the number of ill or deceased people per certain sample categories, about the reasons for termination of insurance contracts, costs ... However, from the exclusively scientific point of view, such data cannot be taken as adequate since the life style, habits, health status and other relevant mortality and/or morbidity factors of the population in, for instance, Austria and Bosnia and Herzegovina, certainly are not the same. Without adjustments, such tables would show a somewhat underestimated premium, resulting in underestimated reserves. Insurance companies resort to adjustments through an interest rate which is included in mortality tables, while solvency margin is calculated on the basis of mathematical reserve (the only risk included here is a death risk). On top of these problems, insurance companies in Bosnia and Herzegovina do not have adequate (or they have very modest) internal data bases which can be taken as the basis to quantify other risks (contract expiry, disasters, costs and so on). The model itself anticipates that companies have internal indicators, however, insurance companies in BiH do not have them.

In the context of applying the standard model, insurance companies in Bosnia and Herzegovina will undoubtedly encounter serious problems when they attempt to apply the life insurance module. The only risk that can be precisely mathematically assessed is the death and longevity risk, but the validity of information at local market remains questionable. Other

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risks could be quantified provided that employees are properly trained and that there is appropriate IT support, but there is still a pressing problem of (currently) unavailable necessary and relevant information.

Once initial problems of implementation are overcome, the new model would surely bring numerous advantages to insurance companies in BiH, in particular in the context of security and adequacy of resources necessary to the company. The implementation of the new model would enable insurance companies to appear at the European market without any fear. On the other hand, it is clear that not all insurance companies from the Bosnia and Herzegovina market would continue their business operation. New demands for capital would certainly considerably surpass the current ones. Present assessments do not require the assessment or quantification of any of the relevant risks arising from the contract itself: contract expiry risk, costs or contract amendments. The only risks assessed now are those directly linked to the offered policy, which certainly is the crucial risk, but definitely not the only one.

Insurance companies in BiH do not have large portfolios and years long experience that could be used to prepare adequate data bases. Another important limitation associated with the implementation of new solutions is presently under-educated staff and lack of funds in insurance companies.

Once directly applied, the standard model will increase capital demands in insurance companies, on top of that, the companies will be able to apply internally developed solutions. In short-term, internal development of the model is a demanding investment, but it brings many advantages in mid and long term. Internal model gives insurance companies the opportunity to calibrate the standard formula to the needs of the company which creates the model. Company can conclude at a certain point that their life insurance portfolio is extremely exposed to risks, for instance risks of contract termination resulting from buy-out of policies. Through internal modeling, this risk weight can be increased, while weight of other risks, ranking low at that moment, can be decreased. Therefore, internal modeling results in a more precise determining of capital demand than it is the case in the conservative approach taken in the standard model. Once applied, the internal model should result in a lower level of capital demand in insurance companies.

When thinking about the consequences of such result, it can be simply concluded that all insurance companies tend to have as many available funds as possible, but not at the expense of unjustified decrease of reservations and exposure to risk. Internal model resolves these issues, keeps the precisely required level of capital and releases a maximum possible amount of disposable capital.

Taking into account currently available resources, insurance companies expect problems in the implementation of internal models (possibilities to develop internal models should primarily be considered, or if not the whole model, than at least internal modules for some risks). Problems are also anticipated in the sophisticated assessment of credit and market risks (in non-life SCR, that is one of the key components).

The market survey and research performed for the needs of this document showed that companies predominantly tend to apply the standard model and do not like to experiment with internal modeling. It can be logically expected that markets this small fear to implement so complex calculations because they lack not only relevant data, but also know-how and

information. From the scientific point of view, development of internal model would be a logical and reasonable step, but the fact is that it would be hard to implement. Internal modeling would give insurance company the opportunity to obtain a perfectly clear picture of the exposure of its capital to different types of risks. In practice, this implies that capital demand would most probably be assessed lower than it would be when classic standard formula is applied. From the expert point of view, the standard formula requires a lot of efforts, investments and additional funds for internal model development. Notwithstanding its positive effects in the long run, company managements would not welcome those new developments.

Through the implementation of the new model of assessment (standard model), insurance companies in Bosnia and Herzegovina would increase the security level of their funds and capital demands. Organized companies would not encounter major problems in the process. On the other hand, companies whose reservations are not determined on the quality basis or in accordance with the fundamental scientific and professional principles (and in accordance with the law), would hardly be able to satisfy such requirements. As a result, the application of the new model should, among other things, help to put insurance market in order.

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MONITORING MATURITY OF BACHELORS' PROFESSIONAL QUALITIES AND COMPETENCES IN MANAGEMENT STUDIES

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ABSTRACT
A list of key competencies of the graduate has been defined by the Council of Europe Symposium on "Key competences for Europe". Since this list of competencies is provisionary, every country and a higher education establishment supplements and elaborates it in accordance with their preferences and requirements. The problem is that the ambiguity of this list leads to controversial approaches to monitoring maturity of graduates-bachelors' skills. There is no single standard mechanism of forming and monitoring key competencies. Our research is devoted to finding a solution to this problem. An algorithm of conducting research was developed by the authors and described below. This article describes the results of the first four stages of the study. It is supposed to write a series of articles devoted to this issue as the stages of the research algorithm move forward.

Keywords: *Competence, Dublin descriptors, Key competence, Monitoring maturity of competences, Personal and professional managerial qualities*

1 INTRODUCTION

Using the term "competence" in modern literature is closely connected with the process of refocusing Russian education from the "knowledge-" to the "competence-targeted" approach, which is pre-requisite for modernization and bringing the results in line with the international standards.

Competency is a set of competences, the availability of knowledge and experience necessary for effective activity in a given subject area. Thus, it may be noted that competence is a set of skills, while competency is a set of competences.

Analyzing articles on this issue, we also noted the category of "competency" as a category. The terms "competency" and "competence", as commonly used synonyms, should be distinguished:

Competence includes a set of interrelated abilities (knowledge skills, ways of activity), defined with respect to a certain range of objects and processes necessary for a high-quality productive activity in relation to them.

Competency is possessing a certain competence including a personal attitude to it and the object of activity.

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Analyzing this issue, L. Zanina, N. Menshikova, and D. Ivanov distinguish the two concepts (Ivanov, 2008; Shalashova, 2007, p. 31):

- "competence" as a set of interrelated abilities (knowledge, skills, ways of activities), defined with respect to a certain range of objects and processes necessary for high-quality productive activities in relation to the them;
- "competency" as possession of a certain competence including a personal attitude to it and the object of activity. As for the most commonly used terms "core competencies", they are determined by the European project " Key competencies Identification and selection "as important "in different spheres of life and which serve as the key to life success and effective society functioning".

Gudkov, Ustich use the following definition of this term: an ability to apply knowledge, skills and personal qualities to succeed in a particular area. This is an ability to successfully operate on the basis of practical experience, skills and knowledge when solving professional problems. On the other hand, the educational standard of HSE says that competence is an ability to apply knowledge, skills and personal qualities for success in a particular area. (Educational standard of the HSE from 02/07/2010).

The third generation standards, developed in relation to a split-level education (Bachelor, Master), use the category of 'competence' (from Lat. *competere* - match, fit), which is interpreted as inability to apply knowledge and skills to operate successfully on the basis of practical experience when solving general problems in a wider area.

In the educational standards of the State Education Budget Institutions of Higher Education "State University - Higher School of Economics", in respect of which the category of "national research university" in the direction of preparation 080200.62 "Management" level of "Bachelor", the following terms: general science, instrumental, socio-personal, general cultural and professional competence. The list of fairly complete, but at the same time there are certain problems of formation of the alleged monitoring competencies. Need to develop a system of indicators of formation, a mechanism of formation and choose the methods and tools of their formation.

The question arises - which can act in such a measure - the rating score of the exam, or the ability to perform a specific set of tasks. What is considered a threshold indicator of formation, and that - the maximum. What methods achieved the formation of competencies and how these methods are consistent with the methods used by teachers of different disciplines. These questions are the basis for further study, in which the need to develop a methodology based means of criteria evaluation of formation of competencies that make it possible to carry out quality monitoring during the whole cycle of bachelor's degree in "Management." To answer these questions, first of all, the algorithm was developed by the study.

It includes the following steps:
1. Determining input and output competences forming the prerequisites a manager must have.
2. Selecting testing methods to determine some input competences and managerial qualities.
3. Conducting an entrance test, analyzing and interpreting the results.
4. Selecting methods, forming competences and managerial qualities.

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5. Applying the methods during the course "Making Managerial Decisions".
6. Monitoring maturity of the competences during the course.
7. Defining validity of the tests used.
8. Conducting an exit test, analyzing and interpreting the results.
9. Developing the mechanism of forming, monitoring and controlling maturity professional managerial competences.

The article describes the results of the first four stages of the research.
Language review: (может это всё-таки обзор литературы?)
Terminology and definitions used in this paper were accepted and offered by Dublin Descriptors for SHORT CYCLE, First Cycle, Second Cycle and Third cycle awards.

'Dublin' Descriptors
The JQI Dublin descriptors for Bachelors and Masters were first proposed in March 2002 (www.jointquality.org). The JQI meeting in Dublin on 23 March 2004 proposed that for a better understanding of the 'Dublin descriptors' in the context of the Berlin communiqué and their possible future usage, alternative headings, as indicated below, may be more appropriate. The JQI meeting on 23 March also proposed a set of shared descriptors for third cycle qualifications. The higher education short cycle (within the first cycle) descriptor was proposed following the JQI meeting in Dublin on 18 October 2004. The complete set of 'Dublin descriptors' is set out below:

Qualifications that signify completion of the higher education short cycle (within the first cycle) are awarded to students who:
- have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;
- can apply their knowledge and understanding in occupational contexts;
- have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;
- can communicate about their understanding, skills and activities, with peers, supervisors and clients;
- have the learning skills to undertake further studies with some autonomy.

Qualifications that signify completion of the first cycle are awarded to students who:
- have demonstrated knowledge and understanding in a field of study that builds upon and their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;
- can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;
- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;
- can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;

- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

Qualifications that signify completion of the second cycle are awarded to students who:
- have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research3 context;
- can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
- have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;
- can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;
- have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

Qualifications that signify completion of the third cycle are awarded to students who:
- have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
- have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
- are capable of critical analysis, evaluation and synthesis of new and complex ideas;
- can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;
- can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society;

Thus, a set of basic competencies have been identified.

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Table 1: Competences for Bachelors

Cycle	Knowledge and understanding:
1 (Bachelor)	[Is] supported by advanced text books [with] some aspects informed by knowledge at the forefront of their field of study ..
	Applying knowledge and understanding:
1 (Bachelor)	[through] devising and sustaining arguments
	Making judgements:
1 (Bachelor)	[involves] gathering and interpreting relevant data
	Communication:
1 (Bachelor)	[of] information, ideas, problems and solutions
	Learning skills:
1 (Bachelor)	have developed those skills needed to study further with a high level of autonomy

With the implementation of the Bologna process in 2010, all the modules and programs in the member states are described using methods based on the results, i.e., in terms of learning outcomes. Learning outcomes are a statement of what a student is expected to be able to do as a result of learning activities (Jenkins and Unwin, 2001).

Since there is no common understanding of the term "competence" in literature, learning outcomes gained a wider circulation as a means of describing what students need to know, understand and/or be able to demonstrate at the end of the module or program (Gidrovich, Egorova and Kurochkin, 2010).

One of the most applicable methods in this case is Bloom's taxonomy with the following classification and learning outcomes:
1. knowledge, 2. understanding, 3. application, 4. analysis, 5. synthesis, 6. evaluation
- Knowledge can be defined as an ability to reproduce or remember facts, not necessarily understanding them.
- Understanding can be defined as an ability to understand and interpret acquired information.
- Applications can be defined as an ability to use learned material in new situations, for example, to apply the ideas and concepts to problem solution.
- Analysis can be defined as an ability to break the information in pieces, for example, to search for links and ideas (understanding an organizational structure).
- The synthesis can be defined as an ability to put the pieces into a whole.
- Evaluation can be defined as an ability to judge the value of material for this particular purpose.

The description of the competences is based on Bloom's taxonomy.

Level of bachelors' preparedness

Increased competition in the labor market creates new challenges for universities. There is a necessity as far as possible ahead of the demands of employers. However, it is very difficult to perform because the state educational standards are a framework and do not timely respond to the dynamics of demand.

Another thing is educational programs developed by educational institutions. They respond promptly to requests from the labor market. However, there may occur some problems, as highlighted above, we have professional competence of the manager may not always accurately describe certain personal qualities and abilities. (In our case it is typical for a manager at various levels). Thus, to have quality programs, it is necessary to identify and analyze the functions of employees' job descriptions and their professional competence. When conducting the research, another definition of professional competence was formulated. (Smirnov, Pahalyuk): "Professional competence is the willingness (ability) of the employee based on the learned knowledge, skills and experience gained to solve the typical professional tasks, to overcome the problem of production situations. They characterize a person as a subject of special activities (as professionals). High competence of employees means that they are guided in a given occupational (industrial) problem, understand its essence, its own ways of successful practical solutions.

Accordingly, a set of leading competences reflects the real expert. The level of developing leading competences is the ultimate result of training, because the specialist does not need to know the individual disciplines (economics, mathematics, chemistry), but be prepared to address common professional challenges, to act in appropriate work situations.

Studies were conducted in the most important branches of economy. They showed the importance of certain qualities and competencies. For example, for senior and middle managers importance assessment of personal qualities are as follows:
1. Responsibility, the ability to work independently as well as the ability to work as a team;
2. Creative approach to business, intuition (estimated from 2.5 to 2.9 points).

Later in the research graduates' overall level of competence has been tested. The results of studies have shown that the highest level refers to theoretical training and expertise, 75% and70% respectively. In this case, the practical application of knowledge is at a much lower level - 40%.

Table 2: Graduates assessment

Preparedness Indicator	Correspondence with the real needs		
	More than enough	Corresponds	Insufficiently corresponds
Theoretical background	10	75	15
Practical skills	30	40	30
Professional skills	20	70	10
The level of learning technology	20	50	30

Similar results were obtained during the 2006 Agency "ReytOR" commissioned by the Foundation for Oleg Deripaska, "The Free Business" study on "Economic education in the universities of Moscow.

In a study in-depth interviews were conducted with heads of schools and businesses, employers, and organized formal surveys of target groups - college seniors, graduate departments of teachers and employers (supervisors of young professionals in the enterprise). The total number of respondents who participated in the study amounted to more than 2,000

people. In general positive results on this issue were received: more than 60% of respondents stated that they have working skills of young professionals meet the requirements of their work. However, these positive results at first glance.

In fact, employers do not take graduates as specialists. For them in many ways it is the material to make a good employee from. Nearly two-thirds of employers believe that graduates with degrees in Economics are necessary to teach additionally. Moreover, the proportion of employers, who have indicated that young professionals match the requirements to the jobs they apply to, is more than 60%.

Thus, there is an obvious necessity to develope a mechanism of monitoring maturity of professional competences according to the algorithm described above. Thus, we have identified certain personal qualities that are to be created when forming undergraduate managemers' professional competence such as:
1. Responsibility,
2. Ability to work independently,
3. Ability to work in a team,
4. Creativity,
5. Intuition,
6. Assertiveness

Let us consider the first stages of the research, conducted by the authors.

Stage 1. Determining input and output competences forming the prerequisites a manager must have
At the first stage we identified training courses, the study of which is preceded by the subject of " Developing and taking management decisions". Since we are interested in a set of competencies that a bachelor must acquire when studying the course "Developing and taking management decisions," it is necessary to determine the location of the course in the academic cycle. In accordance with the educational standards, "Developing and taking management decisions" is studied by third-year- students along with "Business Ethics", "Marketing", "Financial Management","Human Resource Management", "Strategic Management", "Project Management". The variable part consists of two disciplines - "Operations Management" and "Taxes and taxation". In order to create a structure-logical scheme of competence formation when studying "Developing and taking management decisions", it is necessary to bring the competencies to be learned into a single scheme (see Table 2. Let us consider in detail the competencies in each area to identify the disciplines studying of which must precede studying "Developing and taking management decisions".

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Table 3: Professional competence formed when studying "Developing and taking management decisions"

Organizational and managerial activities	Information and analitical activity	Business activity
PC-1, PC-18, PC-3, PC-19, PC-29, PC-16, PC-28	PC-35, PC-47	PC-48, PC-49, PC-50

Organizational and managerial activity

PC-1: knows the main stages of the management thought evolution, outstanding managers' experience and knows how to match them with the circumstances of their own practices); PC-3: is able to offer organizational and managerial decisions and assess conditions and consequences of decisions made;

PC-14: considers the implications of management decisions and actions from the perspective of social responsibility;

PC-16: possesses methods of making strategic, tactical and operational decisions when managing organizations;

PC-18: possesses the tools of strategic management to develop the organizational strategy;

PC-19: is able to analyze the relationships among strategies of different levels in order to prepare balanced management decisions;

PC-29: is able to make decisions using corporate information systems;

PC-28: is able to develop management procedures and controls, knows reengineering methods of business process;

Let us bring the competencies formed and preceding disciplines into the table (see Table. 3).

The analysis of this table reveals the sequence of studying the subjects, as well as "incoming" competences, formed in the previous cycles - mathematical and scientific cycle and human, social and economic cycle.

Table 3: Organizational and management activity – preceding disciplines

Preceding discipline	Theory and History of Management	Organizational Theory and Organizational	Business Ethics	Business Ethics	Strategic Management	Strategic Management	Expert Systems and Decision Support Systems	Project Management, Operations Management	Theory and History of Management
Formed competence code	PC-1	PC-3	PC-14	PC-16	PC-18	PC-19	PC-29	PC-28	PC-1

First, it is necessary to define the output competences of the professional cycle subjects, on the basis of which the input competences of the course "Developing and taking management decisions" are generated (see Table 4).

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Table 4: Output competencies of the professional cycle disciplines

Preceding discipline	Theory and History of Management	Organizational Theory and Organizational Behaviour	Business Ethics	Strategic Management	Operations Management	Project Management	Research Methods in Management
Competencies generated at the output	PC-1, PC-2, PC3, PC-21, PC-47, PC-50, PC-54	PC-1, PC-2, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-	PC-2, PC-3, PC-53	PC-9, PC-16, PC-17, PC-18, PC-19,	PC-16, PC-20, PC-21, PC-47	PC-24	PC-54, PC-55, PC-56, PC-57, PC-58, PC-59, PC-60

In accordance with the educational standards, it is possible to identify output competencies, part of which is the input for the subject studied. For example, as a result of developing "Theory and History of Management", the following competencies should be formed:

Organizational and management activity:
PC-1: knows the main stages of the management thought evolution, outstanding managers' experience and knows how to match them with the circumstances of their own practices);
PC -2: is aware of the social importance of their future profession, is highly motivated to carry out professional activities;
PC-3: is able to offer organizational - managerial decisions and assesses conditions and the consequences of decisions made;
ПК-21: knows modern concepts of organizing operational activity and is able to plan operating (production) activities of organizations;
Information and analytical activity:
PC-47: is able to analyze the operating activities of the organization and use its results to prepare management decisions;
Business activity:
PC-50: is able to assess the economic and social conditions of entrepreneurial activity;
Research and development activity:
PC-54: possesses rules of the problem stating, formulating and testing scientific hypotheses, uses modeling techniques in research, knows the main sources of social and economic information: databases, journals, and conferences.
Besides forming the above-mentioned competencies, studying "Organizational Theory and Organizational Behaviour" leads to forming the next set of competencies:
Organizational and management activity:
PC5: is able to use knowledge about working with groups of people and individual workers in management activity;
PC-6: is able to design an organizational structure to carry out distribution of powers and responsibilities;
PC-7: is able to actively participate in the implementation of the organizational change program;

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PC-8: is able to apply the basic results of motivation theory, leadership and power to solve management problems;

PC-9: is able to participate in the development of organizations' human resource management strategy, to plan and carry out activities aimed at its implementation;

PC-10: possesses modern personnel management technologies;

PC-11: is capable of analysis and design of interpersonal, group, and organizational communication;

PC-12: possesses different ways of conflict resolution;

PC-13: is able to effectively carry out management functions in a multicultural environment;

PC-14: considers the implications of management decisions and actions from the perspective of social responsibility;

PC-15: considers aspects of corporate social responsibility in developing and implementing the organization's strategy;

Studying "Business Ethics" adds to competence formation:

Business activity:

PC-53: ensures the implementation of corporate social responsibility through a close interaction in the business process with all stakeholders, including local authorities, trade associations, local communities, etc.

"Strategic Management" at the output assumes formation of the following competencies, besides the above mentioned.

Organizational and managerial activity:

PC-16: possesses methods for making strategic, tactical and operational decisions in the management of organizations;

PC-17: is able to participate in developing marketing strategies of organizations to plan and carry out activities aimed at its implementation;

PC-18: possesses the tools of strategic management to develop organization strategy;

PC-19: is able to analyze the relationship between the strategies of different levels in order to prepare balanced management decisions;

The subject "Operational Management" is directed to forming competencies in the organisational and managerial activity.

PC-20: is able to participate in the implementation of technological and product innovations;

Information and analytical activity:

PC-47: is able to analyze operational activities of the organization and use the results to prepare management decisions.

The subject "Project Management" provides an opportunity to form the competence of ownership of project management and willingness to implement them using modern software (PC-24).

The course "Research Methods in Management" allows creating the following competences:

Research and development activity:

PC-54: possesses rules of the problem stating, formulating and testing scientific hypotheses, uses modeling techniques in research, knows the main sources of social and economic information: databases, journals, and conferences;

PC-55: possesses methods of quantitative and qualitative analysis and modeling, theoretical and experimental study;

PC-56: is able to collect, analyze and process the data necessary to solving the research problems;

PC-57: is able to select the tools to handle the information in accordance with the set of scientific problem, analyze the results and justify the conclusions;

PC-58: is able to analyze and interpret financial, accounting and other information from reports of enterprises of different ownership forms, organizations, agencies, etc. and use it in the scientific work;

PC-59: is able to analyze and interpret the data of domestic and foreign statistics on socio-economic processes and phenomena, to identify patterns of change of socio-economic indicators;

PC-60: is able to use modern technologies to solve analytical and research problems.

The analysis of the information provided allows seeing that different disciplines are aimed at developing the same professional competencies. For example, the PC-1 and PC-2 competencies are formed when studying the disciplines of "Theory and History of Management", "Organization Theory and Organization Behaviour", "Business Ethics."

The PC-54 competence is formed when studying such subjects as "Theory and History of Management", "Organization Theory and Organization Behaviour", "Research Methods in Mnagement". Formation of many competencies continues in the process of studying "Developing and taking management decisions" which is interdisciplinary. Analysis of the competencies that are to be formed as a result of the course, makes it possible to conclude that almost all the disciplines of professional cycle in a third-year course "Management" should precede the subject "Developing and managing decisions". In this context, the definition of input and output competencies forming prerequisites for the formation of professional competence manager, is only the first step in the process of creating a logical chain formation of professional competence manager.

2   EMPIRICAL METHODOLOGY

According to the developed algorithm for the diagnosis the authors have chosen the following methods:

1. The "Study of motivation in high school" method (T. I. Ilina) includes the three scales: "The acquisition of knowledge" (the desire for knowledge, curiosity); "Mastering the profession" (the desire to master the professional knowledge and build professional qualities); "Getting a diploma" (the desire to acquire a diploma in formal learning, the desire to find workarounds for exams and tests) (Guidance on developmental psychology, 2002, pp. 491–493; http://www.psychometrica.ru/index).

2. Johnson's Creativity Questionnaire (Johnson) to modify E. Tunik (2000, pp. 8–9) is designed to study the development of creative thinking of students. Allows defining characteristics of creative thinking and behavior, available to external observation, on eight scales: sensitivity to the problem, preference of complexity, fluency, flexibility, resourcefulness, creativity, imagination, an ability to structure, originality, creativity and productivity, independence, originality, confident style of self-behavior, self-contained behavior.

3. Verification assertiveness test which is designed to assess assertiveness - an ability to not act against anyone, while respecting the rights of others, but not allowing the "twist of the rope" (http://www.businesstest.ru/).

4. "The willingness to take risks," Schubert (PSK) test to evaluate readiness to take risks. Risk is understood as an action at random in the hope of a happy outcome, or as a potential danger, as action to be taken in the face of uncertainty. Studies based on this test showed that in general: women's willingness to take risk is realized in a more specific situation than men; The military commanders' and business leaders'

willingness to take risks is higher than that of students, with the growth of the individual in a situation of exclusion of internal conflict is growing willingness to take risks, in terms of willingness to take risk is stronger than acting alone, and depends on the expectations of the group (http://www.businesstest.ru/).

5. Test to determine intuition (VV Travin, MI Magura, MB Kurbatova "Preparation and implementation of management decisions ") shows what intuition level a man has.
6. Reference type test
7. This test is mainly used in order to understand whether the trainee is a responsible person. It is likely to predict whether he/she will take responsibility for the progress achieved or will constantly refer to the interference of some external circumstances, the effect of "no season", third parties, etc. Besides, if he would wait help from the outside or try to solve problems on their own, whose estimate they will more rely on - their own or other people's. Also, the test results will indicate the degree of self-confidence, personality strength, and maturity level.

The methodology is based on two conditions:
People differ in how and where they localize control over the events which are significant for themselves. There are two polar types of such localization: external and internal types refer to external and internal reference. In the first case, a person believes that the events that happen to them are the result of external forces – chance, other people, etc. In the second case, a person interprets significant events as a result of their own activities. A person has their certain position on a continuum stretching from external to internal type.

Locus of control, which characterizes an individual, universal in relation to all types of events and situations he has to face with. The same type of control characterizes the behavior of the personality in case of failures and achievements in the field, and this applies equally to the different areas of social life.

The study involved 70 third-year undergraduates of Management faculty.

3   DIAGNOSTIC RESULTS

First, testees were asked to describe the competencies a Bachelor of Management, in their opinion, should have. Test results showed that about 30 percent of students do not fully understand what the competence is, confuse these concepts with the traits and personality characteristics, etc. About 50 percent of respondents said two or three taxonomic competencies that match level of analysis and two or three qualities that a manager should have, for example - an ability to take risks and to work in a group.

The next step was to conduct a series of tests to determine the presence of formation and some of the qualities that we identified in the previous step of the algorithm.

We conducted motivation diagnostics for learning with a test "Studying motivation in high school" (T.I.Ilinoy) (See Chart 1).

The tests showed that among the respondents there is domination of "Getting diploma" scale i.e., the desire to acquire a diploma in formal learning, the desire to find workarounds for exams and tests - 75% of students surveyed.

In second place there is "The acquisition of knowledge" scale, i.e., the desire for knowledge, curiosity. About 75% of the students also preferred this third direction, while about 12% have set this direction on the first place for themselves.

And finally, "Skills development" sale takes the third place, i.e., the desire to master the professional knowledge and build professional qualities. In this case, only 1,25% of the students have put this direction in first place.
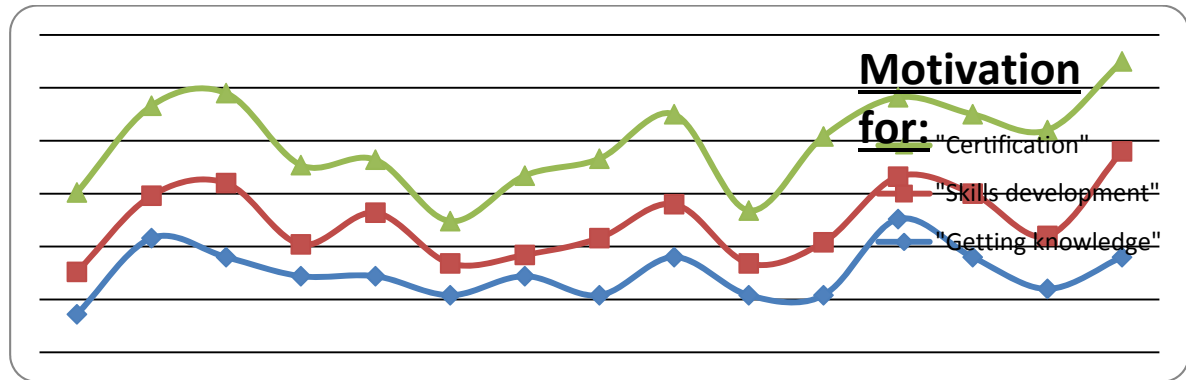
Chart 1: Test results "Motivation to learning in Higher Educational Instittions"

In general, it can be concluded that, first, a sufficiently large number of students are not satisfied with their chosen profession, or they have made the inappropriate choice because of some circumstances.

Second, the data from this study repeat findings mentioned above: in training students the weakest point is practical application of knowledge and skills, while theoretical background is at a higher level.

Next "Risk tolerance" test was conducted (Chart 2)
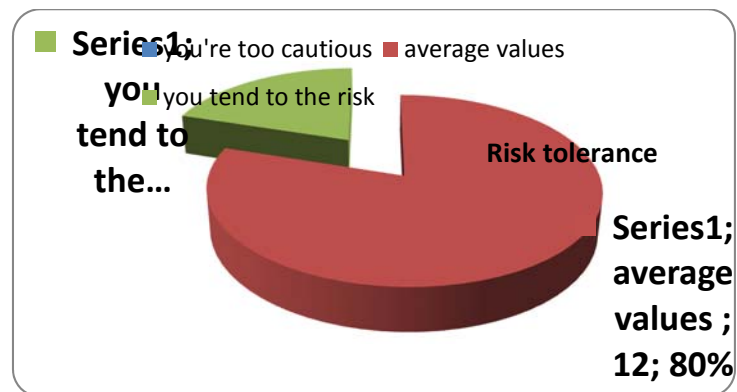
Chart 2: Risk Sentiment–Test Results

Assertiveness test results are shown in Chart 3.

The test results show that about 20% of the respondents tend to make high-risk decisions, while the rest have an average tendency to risk, i.e., make balanced and rational decisions.

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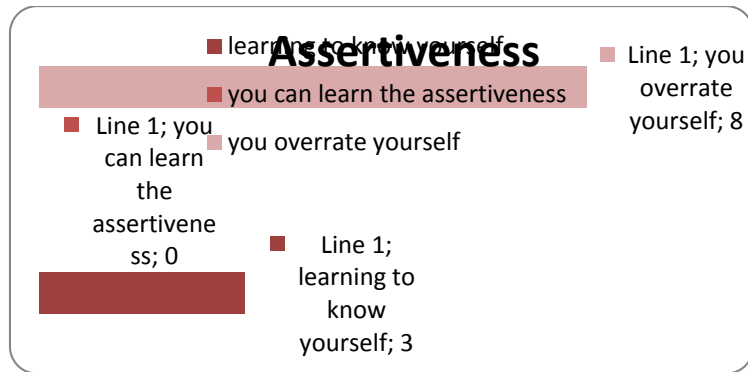
Chart 3: Assertiveness Test Results. Row 1

The chart shows that about 78 % of the respondents overestimate their ability to achieve the desired result, about 21 % are willing to learn to be themselves, and 1% think it is possible to learn.
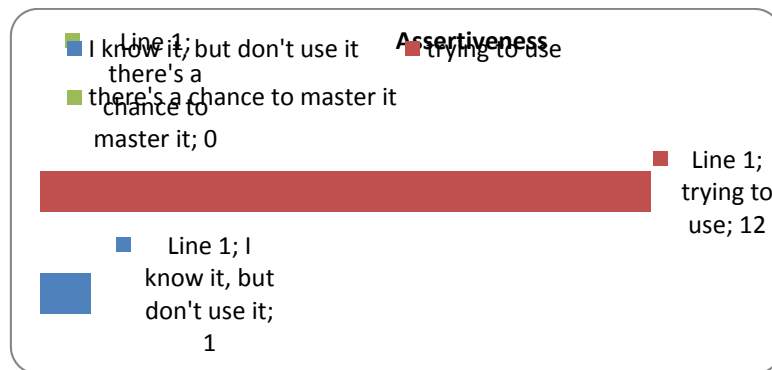
Chart 4: Assertiveness Test results. Row 2

The chart says that about 70% of respondents try to apply this technique, while the remaining 30% do not use it.

The following tests show the creativity of students diagnosed (Chart 5). Among respondents low and very low level of creativity is not inherent to any student. The average level of creativity was identified in 14% of students, high and very high - 55% and 31% respectively.
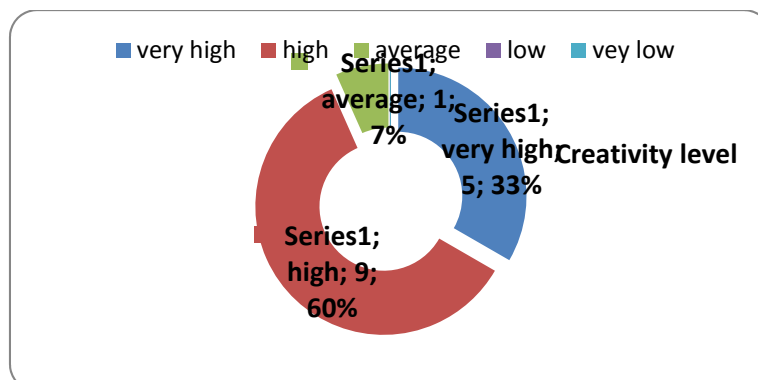
Chart 5: Creativity Test Results

Test of determination the references types revealed that 17% of respondents have a normal level of subjective control. 52% can be attributed to the internal type, which corresponds to a high level of subjective control over any important situations. They believe that the most important events in their lives are the result of their own actions, that they can manage them, and so they feel their own responsibility for these events and their life in general. 31% can be attributed to the external type. Low test level corresponds to the low level of subjective control. These people do not see any connection between their actions and significant events of their life, do not consider themselves being able to control this relationship and believe that most of the events and actions are the result of a chance or other people's actions.

4   CONCLUSION

Thus, making conclusions it should be mentioned, that in the process of work we identified the main professional competencies, formed when studying "Developing and Taking Management Decisions"; identified some characteristics, bachelor management students should possess; chose test methodology and conducted students input test at the beginning of their studying the said discipline mentioned. Tests showed that students have a high creative potential, aimed at a general theoretical knowledge and getting a diploma more than the possibility of its application, they are not very risk averse, and tend to be assertive and willing to learn it.

Further work is aimed at developing and applying techniques of professional competence formation, accurate fixing learning results and further testing. The results of further studies will be described in the following articles.

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BOARD DIVERSITY, NETWORK AND FIRM VALUE

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ABSTRACT
Using a large sample analysis of Thai listed firms, we address an important question. Do board diversity and network add value to firms? This article extends the debate on the benefits and costs of board diversity and network and their effect on the broader picture of corporate governance. Moreover, this article sheds light on the necessity of applying the resource dependence theory in research about boards of directors, in addition to the agency theory. We find that diversity in age and study majors are positively related to Tobin's Q ratio, while diversity in educational levels leads to lower firm value. Our results suggest that boards with diverse age groups and study areas might generate useful advice and complement each other; however, those with diverse educational levels might create costs due to possible conflicts and a lack of coordination and communication. In addition, the results show that alumni networks have a positive effect on Tobin's Q ratio. The findings further suggest that an alumni network is significant to firms because it could help firms obtain external resources. Overall, our research provides significant findings for policy makers to widen viewpoints about corporate governance practices and human resource development in emerging countries.

Keywords: Board of Directors, Diversity, Firm Value, Network, Thailand

1 INTRODUCTION

In a world of increasing globalization, where countries cooperate in order to create even larger economic communities, questions arise as to what are the most important characteristics in determining the success of a firm in a particular market? Given that many countries have different cultural backgrounds and legal frameworks, it is not necessarily going to be the case that the characteristics that guarantee success in one market lead to success in another. However, a common characteristic of many firms is the presence of a board of directors.

A board of directors is one effective governance mechanism, the efficacy of which is widely recognized in both U.S. and non-U.S. models (Globerman, Peng and Shapiro, 2011; Hermalin and Weisbach, 2003; Kaplan and Minton, 1994; Yermack, 2006). In theory, a board represents all shareholders. It is charged with hiring, monitoring, evaluating, replacing, and advising management to ensure that all managerial decisions maximize shareholder returns. Among these functions, the monitoring and advising functions appear to be the most important (Adams and Ferreira, 2007; Boone, Field, Karpoff and Raheja, 2007; Raheja, 2005). Given the influence that a board of directors has on a firm, and thereby its chances of success, an obvious question is, what characteristics do successful boards share in a particular market?

Because the individuals who constitute boards have a great deal of influence over the decision-making process, shareholders and potential investors need to be aware of, and understand, the various characteristics of the individuals who make up the board. When examining this issue, most existing literature has focused on board composition, in particular the monitoring role of boards in governing management teams based on a principle-agent framework. While board composition is considered an important corporate governance mechanism (Globerman et al., 2011; Hermalin and Weisbach, 2003; Kaplan and Minton, 1994; Yermack, 2006), previous work has suggested that other board characteristics such as qualifications and competency of directors, diverse background of directors and the social network of board members are also important during the decision-making process (Espenlaub, Khurshed and Sitthipongpanich, 2012; Johnson and Powell, 1994; Peng, Buck and Filatotchev, 2003).

Moreover, Jiang and Peng (2011) suggest that institutions matter in corporate governance. Network is one of the major institutional characteristics in economies with inefficient markets. At the micro-level, network—both political and alumni, for example—could increase firm value; on the other hand, policy makers should be aware of unfair treatments from close connections. At the macro-level, improving resource allocation could help institutional and economic development. We ask whether firms could overcome market inefficiency through informal and private networks of directors.

When assessing the significance of boards of directors on firm performance and value, the majority of existing empirical research focuses on board structure, which is based upon a principle-agent framework. Specifically, existing studies examine how the size of the board, degree of separation between the chairman and the CEO, and increasing representation by independent directors make boards more effective in the performance of their monitoring role. While the agency theory views a board of directors as monitors over management teams, the resource dependence theory suggests that directors play an important part in providing various advice to managers and extracting external resources for firms.

This study examines how the characteristics of a board influence decision making within a firm. In particular, this paper examines how diversity in the characteristics of a board such as gender, age, educational background, professional expertise and international perspectives affect firm value. On the one hand, it may result in new ideas and skills being brought into the firm, which improve monitoring and advisory efficiency (Anderson, Reeb, Upadhyay and Wanli, 2011). On the other hand, a board with highly diverse individuals may experience some coordination and communication problems (Milliken and Martins, 1996). Additionally, not only does a diverse board bring ideas and skills, but also they bring their social networks of both personal and professional connections. Agrawal and Knoeber (2001), Khwaja and Mian (2005) and Siegel (2007) document, for example, that political networks could help firms obtain external resources such as government concessions; moreover, networks of friends and alumni could provide useful information including opportunities for investment. Nevertheless, Fan, Wong and Zhang (2007) argue that politically connected boards adversely affect firm value and might lead to expropriation problems.

Additionally, the majority of previous studies have analyzed boards in developed markets such as the U.S., UK, Japan, Germany, and Australia. Little evidence has been documented on how board characteristics influence the decision making of firms in emerging markets, such as those in Asia. This study aims to redress this balance in part by using the experience

of Thailand as an example. The 1997 Thai economic meltdown had been perceived as the origin of the whole Asian region's financial failure, indicating that more understandings about Thai firms are needed (Peng, Au and Wang, 2001). Moreover, institutional settings in which corporate governance is embedded are different between developed and emerging markets (Claessens, Djankov and Lang, 2000; Globerman et al., 2011; La Porta, Lopez de Silanes and Shleifer, 1999). Furthermore, a single country study provides a unique analysis because the influence of board of directors can vary under different legal systems, institutional settings, and governance frameworks (Filatotchev, Jackson and Nakajima, 2012).

This study aims to make a number of contributions. First, in addition to examining board composition, an area that has already been extensively studied, we examine how diversity in gender, age, educational background, professional expertise, and international perspectives affect firm value. Second, previous research by Yammeesri and Herath (2010) determines that board composition is not related to firm value in Thai firms. Hence, in this paper we attempt to determine what are the characteristics of Thai boards that do influence firm value. Third, we extend the research done by Choi, Park and Yoo (2007), who focus on the role of outside independent directors as a mechanism of corporate governance in response to the regulatory reform after the Asian financial crisis. The authors find the strong effect of board independence on firm value. We extend their paper by looking at the characteristics of Thai boards in response to public attention of good governance practices, e.g., director qualifications, board diversity and network, and board composition in the wake of the Asian financial crisis. Finally, networks are found to be one of the key institutional characteristics in the Asia-Pacific region (Bunkanwanicha and Wiwattanakantang, 2009; Espenlaub et al., 2012; Peng et al., 2001; Siegel, 2007). In Thailand, Peng et al. (2001) find that military directors are significant to multinational firms. This article differs from Peng et al. (2001) in that proxies of networks combine both political connections, namely ex-military and ex-bureaucrats, and university alumni networks. The remainder of this article begins with backgrounds of corporate governance in Thailand, followed by hypotheses, methods, findings, and discussion.

2 HYPOTHESES

This study breaks down our question of diversity and network into eight discreet hypotheses. Six hypotheses concerning diversity are addressed: 1) gender, 2) age, 3) educational levels, 4) study majors, 5) expertise, and 6) international perspectives. The two remaining hypotheses concerning network are addressed: 7) political connections and 8) alumni networks.

2.1 Gender

From the view that female directors bring different ideas and attributes to board discussions and provide additional board monitoring (Letendre, 2004), gender diversity on boards benefits the firms. We hypothesize that a higher proportion of female directors increases firm value.

Therefore:
Hypothesis 1 Diversity in gender has a positive impact on firm value.

2.2 Age

Regarding how age diversity in boardrooms affects performance, Hagendorff and Keasey (2012) document that director age diversity increases merger returns in the banking industry. McIntyre and Mitchell (2004) find a positive effect of the variation in director age on firm performance. They also find that there exists an optimal level of age diversity among board

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members. Thus, they argue that boards with too little diversity may lack a variety in knowledge, skills and experience, while boards with too much diversity may have conflicts and communication problems.

Therefore:
Hypothesis 2 Diversity in age has a positive impact on firm value.

2.3 Educational levels
As noted by prior research, the educational level indicates an individual's knowledge base and intellectual ability (Bhagat and Black, 1999). A director could use his/her educational knowledge to come up with distinctive perspectives and innovative ideas in advising the management team. It is expected that a board of directors with diverse educational levels could provide applicable and constructive advice to boards, thus resulting in higher firm value.

Therefore:
Hypothesis 3 Diversity in educational levels has a positive impact on firm value.

2.4 Study majors
Various academic majors of directors likely provide managers with broader advice, consistent with the findings of Kim and Lim (2010). They document that diversity in study areas is positively related to Tobin's Q ratio.

Therefore:
Hypothesis 4 Diversity in study majors has a positive impact on firm value.

2.5 Expertise
A board of directors could effectively perform as a result of the presence of diverse functional knowledge and skills of directors. A diversity of talented members could allow firms to obtain different external resources. Using their area of expertise, directors can contribute ideas and share their experience in board meetings (Anderson et al., 2011). It is expected that the expertise of directors matters to firms and will increase the effectiveness of boards and possibilities to obtain external resources, thus leading to higher firm value.

Therefore:
Hypothesis 5 Diversity in expertise has a positive impact on firm value.

2.6 International perspectives
We hypothesize that directors graduated from abroad are expected to have wider viewpoints and to conform to the international environment, which might bring higher competitive advantages over their local rivals (Leblanc and Gillies, 2005). Therefore, it is expected that directors with international perspectives could bring higher benefits, hence increasing firm value.

Therefore:
Hypothesis 6 Diversity in international perspectives has a positive impact on firm value.

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2.7   Political connections

Political connections are found to be related to firm performance. The relationship between outside directors with government experience and firm value is positively significant (Kim and Lim, 2010). The experience of retired bureaucrats is considerably useful in some industries, and firms that deal with the government generally appoint ex-bureaucrats as their directors (Agrawal and Knoeber, 2001; Miwa and Ramseyer, 2005). we expect that political connections of directors are beneficial to firms.

Therefore:
Hypothesis 7 Political connections of directors have a positive impact on firm value.

2.8   Alumni networks

Directors graduated from elite universities are expected to be socially united because of strong ties among alumni and a long history of their institutions. Directors who are tied to such social networks are believed to obtain useful information because of lower asymmetric information among network members (Palmer and Barber, 2001; Siegel, 2007). The relations among network members could facilitate connected directors to extend relations to other stakeholders of firms. Such linkages can obviously help firms in accessing potential markets and finding financial or strategic partners. As a result, connected directors would be able to bring higher financial benefits to firms.

Therefore:
Hypothesis 8 Alumni networks of directors have a positive impact on firm value.

3   SAMPLE, DATA AND METHODOLOGY

Sample firms are non-financial firms listed on the SET, covering the period of 2001 to 2005. This sample period reflects the consequences of one of SET's best practice responses to the financial crisis in 1997, which was to promote professionalism through the training of directors of Thai listed firms. In addition, the period highlights the foresight of listed firms and policy makers in improving corporate governance concerning boards of directors.

The information used to define board characteristics is publicly available from the SET. We focus only on director data, which are provided in Form 56-1, which the Stock Exchange of Thailand requires all listed firms to submit. It is used to disclose relevant information of the company to the public. In addition, financial data are collected from the SETSMART database, which compiles company information of Thai firms listed in the SET. In this study, all financial data are winsorized at 1% and 99%.

We exclude firms in the banking and financial sector because of their non-traditional financial statements. Firms with missing 56-1 forms and financial statements are also removed from the sample. In addition, observations are excluded from the sample if the firm data are in the year of rehabilitation.

We obtained director biographies, including gender, age, educational background, and previous work experience over the previous five years (or more). The individual director data are quantified and aggregated for the whole board to describe the characteristics of a board of directors. Then we define board diversity and network.

Regarding variables in director characteristics, gender diversity is measured by the ratio of the number of female directors to the total number of directors. Diversity measures of age, educational levels, study majors, and expertise are defined by a modification of the Herfindahl Index (HHI). HHI is a concentration measure, while our modified index is a measure of diversity, which is also applied by Hagendorff and Keasey (2012) and Kim and Lim (2010).

Age of directors is divided into five age cohorts: less than 30 years old, 31-40 years old, 41-50 years old, 51-60 years old, and greater than 60 years old. Diversity in age is defined as follows:

$$\text{Diversity in Age}_{i,t} = 1 - \left[\sum_{g=1}^{n}\left(\frac{Age_g}{Total\ number\ of\ directors}\right)^2\right]_{i,t}$$

where Age_g = the number of directors in each age cohort (g).

The educational levels are categorized into the four highest educational levels, i.e., below bachelor's, bachelor's, master's, and doctoral degrees. The variable of the educational levels is defined as a percentage of directors with each of the highest degree level within a board of directors. Diversity in educational levels is defined as follows:

$$\text{Diversity in educational levels}_{i,t} = 1 - \left[\sum_{g=1}^{n}\left(\frac{Edu_g}{Total\ number\ of\ directors}\right)^2\right]_{i,t}$$

where Edu_g = the number of directors in each category of educational levels.

We also classify different knowledge bases into six study areas: 1) accounting/finance/economics, 2) business-related knowledge, 3) law, 4) engineering/science, 5) medicine, and 6) others.[1] Diversity in study majors is defined as follows:

$$\text{Diversity in study majors}_{i,t} = 1 - \left[\sum_{g=1}^{n}\left(\frac{Major_g}{Total\ number\ of\ study\ majors\ of\ all\ directors}\right)^2\right]_{i,t}$$

where $Major_g$ = the number of majors held by all directors in each study area.

Work experience of directors is divided into seven areas of expertise: 1) accounting/finance/economics, 2) business, 3) law, 4) engineering/science, 5) medicine, 6) academic professor, and 7) others.[2] Diversity in expertise is defined as follows:

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[1] The Type 2 knowledge base is defined to capture the effect of business-related degrees, which are excluded from Type 1.

[2] We use pairwise correlation analysis to test whether variables of diversity in study majors and diversity in expertise are highly correlated. We find that these two independent variables are not significantly correlated.

$$\text{Diversity in expertise}_{i,t} = 1 - \left[\sum_{g=1}^{n} \left(\frac{Expertise_g}{Total\ number\ of\ work\ experience\ of\ all\ directors} \right)^2 \right]_{i,t}$$

where $Expertise_g$ = the number of work experience held by all directors in each area of expertise.

The variable of diversity in international perspectives of directors is defined as the ratio of the number of directors graduated from abroad to the number of directors graduated from local institutions.

Network variables are defined to demonstrate director abilities in seeking and obtaining external resources and information from their social networks. We define political connections as a dummy variable that is equal to 1 if there is a former government, police, or military officer on board, and zero otherwise. The alumni network variable is defined as a proportion of directors who graduated from Chulalongkorn University, which is the most elite and longest established university in Thailand.

Considering board composition, board size is defined as the number of directors. Board independence is measured by the fraction of independent directors. CEO duality is a dummy variable equal to 1 if the CEO also holds the position of chairman of the board, and zero otherwise. The percentage of executive and non-executive directors to total directors is also provided in the descriptive analysis.

We investigate the impact of board diversity, network, and composition on firm value, using a regression analysis. The model is controlled by industry and year effects as follows:

$$Firm\ value_{i,t} = \alpha_{i,t} + \beta_1 Gender_{i,t} + \beta_2 Age_{i,t} + \beta_3 Edu_{i,t} + \beta_4 Major_{i,t} + \beta_5 Expertise_{i,t} + \beta_6 Inter_{i,t}$$

$$+ \beta_7 PolCon_{i,t} + \beta_8 Alumni_{i,t} + \beta_9 BoardSize_{i,t} + \beta_{10} Independence_{i,t} + \beta_{11} Duality_{i,t}$$

$$+ \beta_{12} Size_{i,t} + \beta_{13} Leverage_{i,t} + \beta_{14} Firm\ age_{i,t} + \beta_{15} Sales\ growth_{i,t} + \beta_{16} Ind_{i,t} + \beta_{17} Year_{i,t} + \varepsilon_{i,t}$$

Firm value is measured by the market to book ratio (a proxy of Tobin's Q ratio), which is the ratio of market value of total assets to book value of total assets. Our main independent variables include board diversity and network as discussed in the previous section. We also introduce several variables into our analysis to control for board composition, firm characteristics, and industry and year effects. Board composition includes board size, board independence, and CEO duality. Firm characteristics include size (proxied by the log of sales), leverage (proxied by the ratio of total debt to total assets), firm age (proxied by the number of years since establishment), and sales growth (proxied by the annual change in sales).

4   FINDINGS
Table 1 shows that gender diversity is low in Thai boardrooms. Only about 16% of total directors are female. Nevertheless, around three quarters of the sample firms have at least one woman on the board. Concerning director age, the results show that the average age of

directors is roughly 55 years old, with the youngest average age of around 40 years old and the oldest average age of around 70 years old. When separating director age into five cohorts, we find that directors who are in the range of 51-60 years old are appointed most often, with the average number of four directors and the maximum number of 18 directors per board. Moreover, about 95% of companies have at least one director who is in the 51-60-years-old age cohort. Interestingly, directors who are younger than 40 years old occupy only one board seat on average. Nonetheless, these young directors are appointed by almost 60% of firms. As for age diversity measure, the mean value is 0.59 (median, 0.62), while the highest value is 0.78.

Regarding educational levels of directors, almost 10%, 40% and 35% of directors have the highest degree of a doctoral, master's, and bachelor's degree, respectively. Diversity in educational levels is similar to diversity in age. Specifically, the average diversity index is 0.57 (median, 0.59) and the maximum is 0.75. The results of study majors of directors show that business administration is the most frequently found academic major on the board, followed by accounting/finance/economics and engineering/science, respectively. It is interesting to find that law is one of the least commonly found study areas in our sample. Diversity measure of educational majors appears to be higher than that of educational levels. More precisely, the mean value of diversity measure of study majors is 0.65 (median, 0.68) with the maximum value of 0.82.

As expected almost all firms have a director with some business expertise, while roughly 60% of the firms have a director with accounting, financial, or economics skills. Consistent with the results of educational background, only 20% of firms appoint a director with legal experience. Also, academicians are appointed as director in less than 10% of firms. Compared with other diversity indices, expertise diversity index is the lowest. The average is 0.4 (median, 0.42) and the highest is 0.79. This result shows that expertise of directors is not as diverse as study areas. Furthermore, on average, about 60% of the directors have studied overseas. As a diversity measure of international perspectives, the average ratio of the number of directors with international education to the number of directors with local education is 2.13 (median, 1.4). The ratio ranges from 0 to 18.

Considering networks of boards of directors, interestingly, a large number of Thai listed firms appoint directors who were in government sectors. Approximately 70% of the sample firms appoint former bureaucrats as the directors. As for the network through education from alumni of the most prominent university in Thailand, about 15% of the directors are alumni of Chulalongkorn University.

In terms of board composition, the results show that the average number of directors on board is around 11, with the minimum of five (as stipulated by the law) and the maximum of 25. Independent directors account for about one third of total directors, which is consistent with the regulation by the SET. This may imply that listed companies appointed independent directors only to meet the minimum requirement. However, when considering the fraction of external directors (i.e., independent and non-executive directors), these directors consist of roughly 60% of total board seats, which is the majority of the board. We also find that almost one quarter of Thai companies combine the CEO and chairman positions.

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Table 1: Descriptive statistics of board characteristics and composition

Variables	Mean	Standard deviation	Median	Min	Max
Board characteristics					
Gender:					
Percentage of firms with female directors	78.21	-	-	-	-
Percentage of Female directors	16.22	14.16	13.64	0	75.00
Age:					
Average age of directors	55.52	4.78	55.67	40.08	70.17
No. of directors who are					
- Less than 30 years old	0.11	0.36	0	0	3
- 31-40 years old	0.86	1.05	1	0	6
- 41-50 years old	2.70	1.84	2	0	11
- 51-60 years old	4.07	2.47	4	0	18
- Older than 60 years old	3.71	2.67	3	0	12
Percentage of firms with directors who are					
- Less than 30 years old	8.95	-	-	-	-
- 31-40 years old	52.61	-	-	-	-
- 41-50 years old	91.91	-	-	-	-
- 51-60 years old	95.88	-	-	-	-
- Older than 60 years old	91.21	-	-	-	-
Diversity in age	0.59	0.11	0.62	0	0.78
Educational levels:					
Percentage of directors who have					
- Below bachelor's degree	14.04	14.41	10.00	0	87.50
- Bachelor's degree	36.77	19.11	36.36	0	92.86
- Master's degree	39.37	19.45	37.50	0	100
- Doctoral degree	9.81	10.91	8.33	0	66.67
Diversity in educational levels	0.57	0.11	0.59	0	0.75
Study majors:					
No. of directors whose study major is					
- Accounting, finance, or economics	2.82	2.21	2	0	16
- Business administration	3.43	2.36	3	0	13
- Law	0.79	1.05	0	0	8
- Engineering or science	2.86	2.97	2	0	30
- Medicine	0.37	1.26	0	0	11
Percentage of firms with directors whose study major is					
- Accounting, finance, or economics	88.02	-	-	-	-
- Business administration	92.68	-	-	-	-
- Law	49.88	-	-	-	-
- Engineering or science	82.80	-	-	-	-
- Medicine	15.33	-	-	-	-
Diversity in study majors	0.65	0.13	0.68	1	0.82

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Table 1 continued

Variables	Mean	Standard deviation	Median	Min	Max
Expertise:					
Percentage of firms with directors whose expertise is					
- Accounting, finance, or economics	59.61	-	-	-	-
- Business administration	98.99	-	-	-	-
- Law	21.25	-	-	-	-
- Engineering or science	35.64	-	-	-	-
- Medicine	28.72	-	-	-	-
- Academics	8.16	-	-	-	-
Diversity in expertise	0.40	0.20	0.42	0	0.79
International perspectives:					
Percentage of directors who have international education	61.09	-	-	-	-
Diversity in international perspectives	2.13	2.36	1.4	0	18
Political connections:					
Percentage of firms with directors who are a former government, police or military officer	68.79	-	-	-	-
Alumni networks:					
Percentage of directors who are alumni of Chulalongkorn University	15.27	16.90	11.11	0	90.00
Board composition					
Size:					
: No. of directors on board	11.44	3.20	11	5	25
Independence:					
Percentage of executive directors	42.09	17.27	42.86	5.26	81.25
Percentage of non-executive directors	26.42	18.97	25.00	0	78.95
Percentage of independent directors	31.49	9.61	30.00	12.00	83.33
CEO duality:					
Percentage of firms with CEO duality	23.35	-	-	-	-

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Table 2: The impact of board diversity and network on firm value

	Model (1)		Model (2)		Model (3)	
Board diversity						
Diversity in gender	0.1016				0.0978	
	(0.431)				(0.449)	
Diversity in age	0.2577				0.2925	*
	(0.102)				(0.059)	
Diversity in educational levels	-0.3401	**			-0.3231	**
	(0.012)				(0.017)	
Diversity in study majors	0.2702	**			0.2389	**
	(0.024)				(0.046)	
Diversity in expertise	-0.1288				-0.1648	
	(0.178)				(0.122)	
Diversity in international perspectives	-0.0039				-0.0011	
	(0.545)				(0.862)	
Board networks						
Political connections			0.0228		0.0513	
			(0.539)		(0.229)	
Alumni networks			0.2838	***	0.2633	***
			(0.004)		(0.007)	
Control variables						
Board size	-0.0184	***	-0.0182	***	-0.0190	***
	(0.006)		(0.006)		(0.005)	
Independence	-0.1008		-0.1913		-0.1115	
	(0.677)		(0.409)		(0.640)	
Duality	-0.0117		0.0008		-0.0011	
	(0.780)		(0.985)		(0.980)	
Size	0.1027	***	0.0895	***	0.0965	***
	(0.000)		(0.000)		(0.000)	
Leverage	-0.2489	***	-0.2208	**	-0.2451	***
	(0.004)		(0.010)		(0.005)	
Firm age	-0.0031	*	-0.0030	*	-0.0028	*
	(0.055)		(0.061)		(0.084)	
Sales growth	0.1182	***	0.1179	***	0.1164	***
	(0.006)		(0.007)		(0.007)	
Year dummy	Yes		Yes		Yes	
Industry dummy	Yes		Yes		Yes	
No. of observations	1,285		1,285		1,285	
Adjusted R-squared	0.1795		0.1783		0.1836	

Table 2 shows the impact of board diversity and networks on firm value. Model 1 presents the regression results of the effects of diversity on firm value. In addition to board diversity, we investigate the impact of board networks on firm value as shown in Model 2. In Model 3, we combine variables of board diversity and networks.

Focusing on board diversity, the results of Model 1 and Model 3 show no evidence to support the impact of gender diversity on firm value. Hence we reject Hypothesis 1. These findings are consistent with Zahra and Stanton (1988), Shrader, Blackburn and Iles (1997), and Rose (2007). Model 1 also shows the insignificant result of age diversity. However, in Model 3, age diversity becomes positively significant to firm value, which supports Hypothesis 2. The significance level is marginal, though. The significance of age diversity to firm value is in line with McIntyre and Mitchell (2004) and Hagendorff and Keasey (2012). In both Model 1 and 3, we find that diversity in educational levels leads to lower firm value. The significantly negative relationship between the diversity in educational levels and firm value indicates that Hypothesis 3 is rejected. In contrast, the firm value is positively associated to the diversity in study majors. Thus, we accept Hypothesis 4. Nevertheless, the results show that diversity in expertise and international perspectives of boards are not significant to firm value. Thus, we reject Hypothesis 5 and Hypothesis 6.

In addition to board diversity, we investigate the impact of board networks on firm value as shown in Model 2. We find no supporting evidence about the impact of political connections on firm value; thus, we reject Hypothesis 7. However, the value of firms is positively associated with the proportion of directors with an alumni network, therefore, we accept Hypothesis 8. The network of directors who were graduated from the oldest and arguably most prestigious university seems to be beneficial to Thai firms; this result is consistent with the findings of Siegel (2007). In Model 3, in which we combine variables of board diversity and networks, the effects of board networks on firm value remain significant as shown in Model 2.

Regarding the aspects of board composition as control variables, we find the influence of board size on firm value in all three models. The number of directors on a board is negatively related to firm value. This implies that large boards might adversely affect communication and coordination in Thai firms and might not play an effective monitoring role as documented by Jensen and Zajac (1993) and Lipton and Lorsch (1992). Our findings concerning the impact of board size on firm value confirm the results of Eisenberg, Sundgren and Wells (1998), Mak and Kusnadi (2005), Van Ees, Van der Laan and Postma (2008), Van Essen, Van Oosterhout and Carney (2011) and Yermack (1996). However, the impacts of board independence and CEO duality on firm value are not significant in this paper, which is similar to previous research (Chen et al., 2008; Dahya et al., 2009; Daily and Dalton, 1997; Dalton et al., 1998; Van Essen et al., 2011).

The results of Model 1 to Model 3 also show that firm size and sales growth are positively associated to Tobin's Q ratio. The larger firms and firms with investment opportunity are more valuable. In contrast, we find that the leverage ratio and firm age are negatively related to firm value. The higher leverage ratio could lead to poor firm value, and the younger firms seem to have better growth opportunity to generate higher value.

5   CONSLUSION
Boards of directors are one of the most important mechanisms of corporate governance to monitor and advise top management. In response to the financial crisis in 1997, the SET has recommended firms to appoint competent directors and has highlighted the importance of directors' qualifications and board composition. We investigate the board characteristics and their impact on firm value by introducing several measures of board diversity (gender, age,

educational levels, study majors, professional expertise, and international perspectives) and networks (political connections and alumni networks).

The results show that the diversity in age and academic majors of Thai boards appears to be beneficial to firms, while diversity in educational levels adversely influences firm value. In 2006, the revised version of *Principles of Good Corporate Governance* added the principles about the structure of the board of directors. That is, a board should consist of directors with various skills, experience, and expertise that are useful to the company. However, we find that Thai listed firms are concerned about the importance of director diversity in different dimensions at the wake of the Asian financial crisis. Our findings also confirm that networks are one of the key institutional characteristics in emerging markets. However, we find only the value of the alumni network of an elite university in Thailand, not those of political connections. Board composition (size, independence and CEO duality) was also included, and the results show that smaller board size is more valuable to Thai firms, suggesting a more effective monitoring role.

Our findings have important implications that diversity and networking of human resources, especially directors, are important for firms in today's dynamic and competitive business environment. Given similar features of corporate governance among Asian countries (Globerman et al., 2011), our results provide additional evidence for relevant authorities to widen their viewpoints about corporate governance practices and human resource development in Asia-Pacific region. In addition, the findings are consistent with the direction of the best practices in enhancing board competencies and director qualifications.

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INTERPRETATION OF THE DIRECTIVE 2010/32/EU AND ITS IMPACT ON COMPETITIVENESS OF COMPANIES WHICH PRODUCE DEVICES FOR VACUUM BLOOD COLLECTION

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ABSTRACT

The council of the European Union has issued Directive 2010//32/EU, which speaks about the implementation of the Framework Agreement on prevention from sharp injuries in the hospital and healthcare sector. The aim of the Directive is to prevent injuries to workers caused by medical sharps. The recommendations are certainly welcome, however, is the interpretation of manufacturers of such products harmonized and what does the Directive bring to these companies in terms of competitiveness? The purpose of this study is to determine what impact the Directive will have after May 2013 when it comes into effect on the competitive advantage of companies that produce these products and whether the interpretations of individual companies, providing medical devices which incorporate safety-engineered protection mechanisms, vary from company to company. The aim of the research with the detailed view of three world famous brands and their products for blood vacuum system is to present their products which should ensure the compliancy with the Directive and to assess their impact on the competitiveness of individual companies. A qualitative method with the usage of case studies was use for this study. Based on a desktop research, we have found out that the companies indeed interpret the directive in a different way, giving them a competitive advantage, or otherwise competitive disadvantage, which depends on legal representatives and legislation in every country.

Keywords: Competitive advantage, Directive 2010/32/EU, Needlesticks, Qualitative research, Safety devices for vacuum blood collection

1 INTRODUCTION

Thousands of years ago people started using discharge of blood to treat a variety of illnesses. Discharge of blood can be classified as one of the oldest forms of medicine, which was popular among physicians until the end of 19th century. The vein was cut and the blood was squeezed into containers. They thought this would make a sick person get well. Due to the excessive discharge of blood a president George Washington was supposed to die. A major turning point in philosophy of medicine began when people discovered more about a human body. Dr. Pravaz Charles Gabriel, a French surgeon, and Alexander Wood, a Scottish doctor invented a hypodermic syringes, which were first used for the injection of morphine and then for a drawing of blood. In 1897 the Maxwell Becton and Farleigh S. Dickson founded the company, which began producing glass syringes (following the example of French). In 1970, laboratory personnel started to take blood with steel needles and glass syringes. After analysis they washed syringes and test tubes, however, needles were washed and then re-sharpened and finally sterilized. In 1949, Kleiner Joshep invented the "Evacutainer", which consisted of tubes and needles. The needle consisted of front part, which went in to a vein and a back part through which blood was dripping into a test tube due to the pressure in the vein. While replacing the tubes, the problem occurred how to stop the leakage of blood from the back part of the needle during switching of tubes. In 1973, Sinae Miyake found a solution for this problem by placing a multiple sample sleeve over the proximal needle. The existing glass

tubes were replaced with plastic tubes containing vacuum (Stoker, 2009, pp. 1–2). As we can see, companies have always been looking for better solutions. They have been trying to manufacture a new innovative product to solve problems.

Nowadays blood is used for the analysis and diagnosis. There are several companies that manufacture devices for vacuum blood collection. Three of the most common systems are Vacutainer (Becton, Dickinson and company), Vacuette (Greiner Bio-One GmbH) and VenoSafe (Terumo), which follow the guidelines and demand in the sector and market. Compared with previous products, new products are user-friendly for the patient as well as for laboratory technician, but there is still a room for upgrading and improvement.

Among the 35 million health workers worldwide, about 3 million experience percutaneous exposures to blood borne pathogens each year; two million of those to HBV, 0.9 million to HCV and 170 000 to HIV. These injuries may result in 15 000 HCV, 70 000 HBV and 1 000 HIV infections. More than 90% of these infections occur in developing countries (Rapiti, Prüss-Üstün and Hutin, 2005, p. 49). Estimates indicate that 600,000 to 800,000 needlestick injures occur each year. Unfortunately, about half of these injuries are not reported (NIOSH, 2000, p. 2).
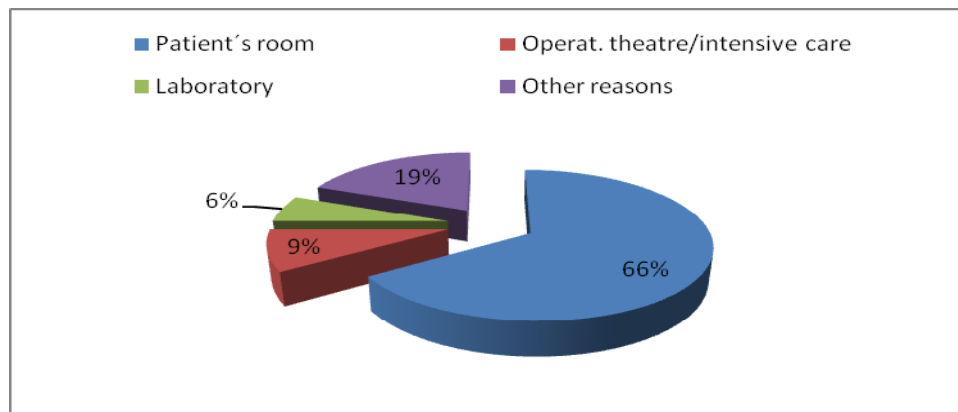

Chart 1: Where Do the Accidents Occur (Vacuette Safety brochure, 2011, p. 5)

Chart 1 shows that the most accidents with needlesticks injuries occur in patient's rooms - 66%, followed by other reasons – 19%, 9% occur in theatre/intensive care and the least accidents occur in a laboratory - 6%.
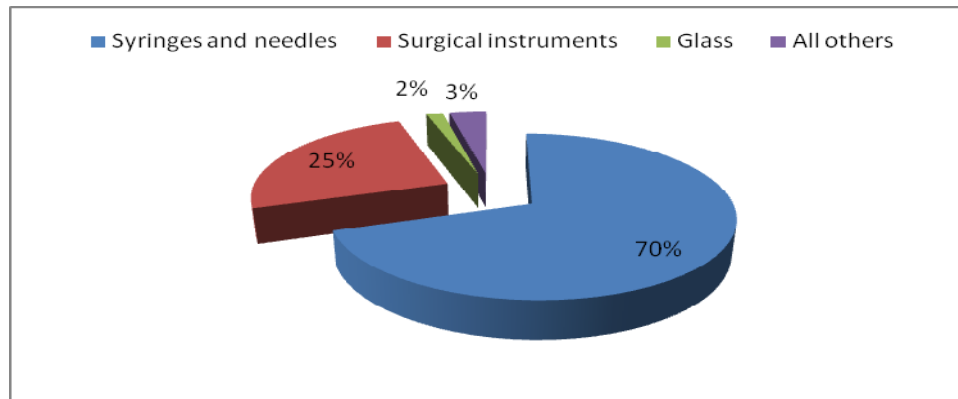
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Chart 2: Which Objects Cause Injuries (Safety first Kooperative, Bundesverband der Unfallkassen, referenced by Vacuette Safety brochure, 2011, p. 5)

Chart 2 shows that the most injures are caused with syringes and needles - 70%, followed by surgical instrument - 25%, 3% injures are caused by other object and the least accidents occur with glass object -2%.

According to statistic data it can be concluded that injures with needle-sticks in the medical field are really a reason for concern and that it is more than necessary to reduce them, therefore, Directives 2010//32/EU, which speaks about the implementation of the Framework Agreement on prevention from sharp injuries in the hospital and healthcare sector is more than welcome. In accordance with the Directive and 3 Article, Member States should adopt the laws, regulations and administrative provisions necessary to comply with it, or they have to ensure implementation of the measures required no later than by 11th May 2013 (Official Journal of the European Union, 2010, p. 67). The purpose of this framework agreement is to achieve the safest possible working environment, to prevent workers injuries caused by all medical sharps (including needlesticks) and to prevent workers at risk. This agreement includes hospitals and health centers and appeals to all employees in these institutions. All employees are required to comply with this Directive.

The most important clause in the Directive, which includes safety vacuum blood draws is Clause 6: Elimination, prevention and protection, which in the second indent says: »Eliminating the unnecessary use of sharps by implementing changes in practice on the basis of results of risk assessment, providing medical devices incorporating safety - engineered protection mechanisms« (Offical Journal of the Eupropean Union, 2010, p. 71).

Safety is a matter of different aspects. Who decides what safety devices with engineered protection mechanisms mean? An individual in an institution in a certain country will decide and consequently limit competitors by prejudicing the company that markets medical devices. Market can be defined as individuals or companies where a certain need arises, which companies try to meet with their product or services (Kotler and Trias De Bes, 2004, p. 23). It is true that companies are trying to adapt quickly to the demand of the market and be innovative, but innovation process includes research and interpretation for opportunities of new or improved products or processes, which are based on "know-how", changes on the market or a combination of both (Fagerberg, Mowern and Nelson, 2005, p. 88). Companies must thoroughly consider their strengths and weakness and prepare the appropriate strategic plans. Strategic planning must include creativity and innovation. In order to make changes, managers must be one step ahead from the competition and think in a different way, find a

different solution than the competition, consumers and their needs must be a center of their attention (Principles of general management, 2007, p. 569). If they can recognize the signs, the theories of innovation can be a useful method for the future (Christensen, Anthony and Roth, 2004, p. 243).

The purpose of this study is to determine what impact the Directive will have after May 2013, when it comes into effect, on the competitive advantage of companies that produce these products and whether the interpretations of individual companies, providing medical devices which incorporate safety-engineered protection mechanisms, vary from company to company. The aim of the research is with the detailed view of three world famous brands and their products for blood vacuum system, to present their products which should ensure the compliancy with the Directive and to assess their impact on the competitiveness of individual companies. On this basis, we set two hypotheses:

  H1: Interpretation of the directive differs from company to company (a manufacturer of devices for vacuum blood collection).

  H2: Interpretation of the directive will affect the competitive advantage of companies that manufacture and market products for vacuum collection.

2   METHODS SECTION

A qualitative method with the usage of case studies was use for this study. With desktop research, we want to find out how many sharps injuries were between health-care workers worldwide, what are the guidelines of WHO on drawing blood Safety-engineered devices, view the biggest risks for health worker between the blood drawn and examined how to decrease the risk. We examine in detail, tree the most common systems in the world Vacutainer (Becton, Dickinson and company), Vacuette (Greiner Bio-One GmbH) and VenoSafe (Terumo). We wanted to found, what the companies offer to meet the directive, which talks about using safety-engineered protection mechanisms.

3   BLOOD DRAWN AND NEEDLESTICKS

Phlebotomy – the drawing of blood – has been practiced for centuries and is still one of the most common invasive procedures in health care. Each step in the process of phlebotomy affects the quality of the specimen and is thus important for preventing laboratory error, patient injury and even death (WHO guidelines on drawing blood: best practices in phlebotomy, 2010, p. 13). Phlebotomy involves the use of large, hollow needles that have been in a blood vessel. The needles can carry a large volume of blood that, in the event of an accidental puncture, may be more likely to transmit disease than other sharps. Blood borne organisms that have been transmitted after needlesticks include viruses such as hepatitis B and human immunodeficiency virus (HIV), bacteria such as syphilis and parasites such as malaria. (WHO guidelines on drawing blood: best practices in phlebotomy, 13). In the year 2000, sharps injuries to health-care workers worldwide resulted in 16 000 HCV infections that will cause 145 (53−766) early deaths between the years 2000−2030; 66 000 HBV infections that will lead to 261 (86−923) early deaths by 2030; and 736 (129−3578) health-care workers will die prematurely from 1000 HIV infections by 2030 (Rapiti, Prüss-Üstün and Hutin, 2005, p. 43). Accidental needlesticks per day – 2400; Estimated accidental needle-sticks injuries sustained by health workers worldwide per year is 1 million (Ernest, 2005, p. 244). Because all the above mention facts is definitely need to adopt guidelines / directives to avoid future stitches.

4   SAFETY DEVICES

Definitions for Safe injection and for Sharp protection device, of WHO guideline are: »Safe injection - An injection that does no harm to the recipient, does not expose the health worker to any risk and does not result in waste that puts the community at risk, sharps protection device: A sharp or needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids. The device has a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident« (WHO guidelines on drawing blood: best practices in phlebotomy, 2010, p. 109).

Table 1: Safety-engineered devices (WHO guidelines on drawing blood: best practices in phlebotomy, 2010, p. 71)

Passive		
Auto-disable (AD) syringes NOT recommended for blood drawing.	Not recommended for phlebotomy. Designed to prevent reuse, does not reduce the risks of needlesticks.	During probing, safety mechanism can be activated, requiring new venepuncture. Requires blood transfer, creating risk of needle-stick injuries. Difficult to draw large or multiple blood samples. Does NOT offer needle-stick prevention. Air in the syringe can affect test results. Requires additional training.

Safety-engineered device should offers protection to health worker, but they should be suitable for the specific task. As we can see from the table above auto-disable syringes are not appropriate for phlebotomy. Let's look the type of risk for health workers and how can they reduce the risk.

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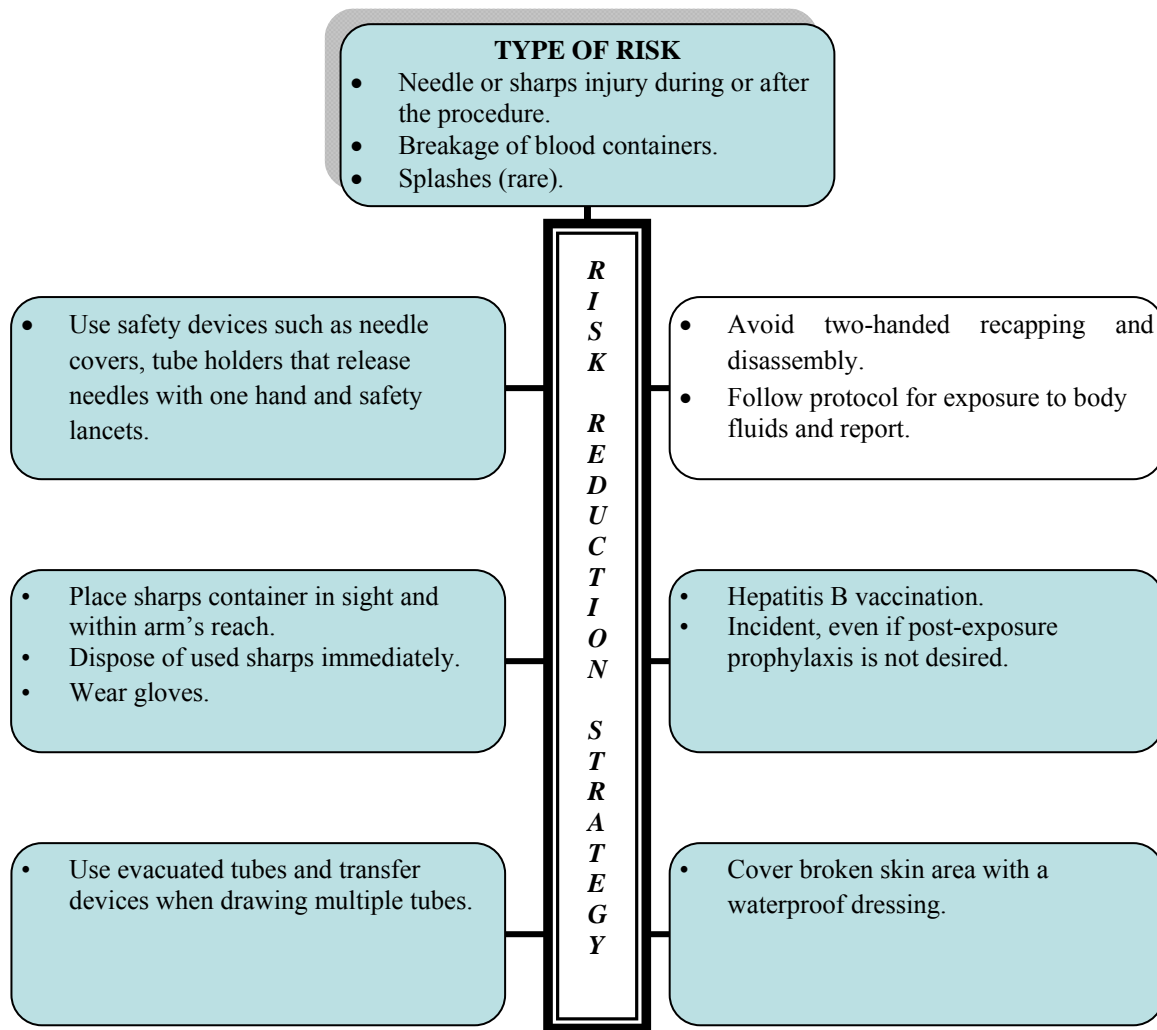
Figure 1: Summary of risks and risk-reduction strategies to health worker (WHO guidelines on drawing blood: best practices in phlebotomy, 2010, p. 55)

4.1   Safety devices in accordance with Directive

Based on previous findings, we examined individual products of worldwide companies (Becton, Dickinson and company, Greiner Bio-One GmbH and Terumo) which should meet the Directive.

Becton, Dickinson and company

The company was established in 1897. BD is a medical technology company that serves healthcare institutions, life science researchers, clinical laboratories, industry and the general public. BD manufactures medical supplies, devices, laboratory equipment and diagnostic products and sells it in more than 50 countries worldwide.

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*Figure 2: BD Vacutainer® Eclipse™ without holder or with holder
(http://catalog.bd.com/bdCat/search.doCustomer?searchText=368651)*

»These sterile, safety-engineered, multi-sample blood collection needles offer a simple, effective way to collect blood while reducing the possibility of needlestick injuries« (https://us.vwr.com/store/catalog/product.jsp?product_id=4646701).

As we can see from the pictures BD Vacutainer Eclipse can be removed from the holder, which means that medical workers can remove them from the holder and reuse them. Because BD Vacutainer Eclipse is attached to the needle it can be used with BD Vacutainer* Pronto* Quick Release Needle Holder - reusable plastic holder, which can be used for multiple use.

Figure 3: Pronto Quick Release Needle Holder
(http://www.cenmed.com/productDetail.php?productid=18189&catID=&category=5380&m
aincat=&cat=)*

Greiner Bio One International AG
GBO started with as a small cork manufacturing company at the end of the 19th century. Today, Greiner Bio-One International AG is a world market leader in the field of biotechnology, diagnostics, pharmaceutical, medical and In Vitro diagnostics. The product range includes products for blood collections. The products are sold in over 100 countries worldwide.

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Figure 4: VACUETTE® QUICKSHIELD Safety Tube Holder with needle or without needle (VACUETTE QUICKSHIELD Safety Tube Holder, 2011, p. 3)

»The VACUETTE® QUICKSHIELD Safety Tube Holder is especially suitable for use in daily blood collection routines. Without the need to change collection techniques, the holder helps prevent needlestick injuries« (VACUETTE QUICKSHIELD Safety Tube Holder 2011, p. 3). Holder produced by GBO has a pre-assembled protective cap, which means that user can choose the thickness of the needle. All the needles have a thread, which means that they need to be tightened into the holder. After use, the entire set has to be discarded, because the needle is locked with a protective cap.

Figure 5: VACUETTE® PREMIUM Safety Needle System Tube-Touch (VACUETTE Safety brochure, 2011, p. 19)

The user manual says: »When the user pushes in the tube, the pressure of the tube onto the back end of the needle releases the safety shield, automatically covering the needle which moves forward lightly resting against patient´s skin« (VACUETTE Safety brochure, 2011, pp. 19–20).

Terumo Corporation
Terumo foundation dates back to the year of 1921 as a manufacturer of clinical thermometers. Terumo Corporation has grown worldwide to a position of leading manufacturer of medical devices. They develop, manufacture, export, import, markets, distribute and sell a diverse portfolio of medical devices, supplies, and accessories. They have 13.000 employees worldwide.

Figure 6: Quick fit system holder with needle, needle (http://www.terumo-europe.com/laboratory/products/acc_holders.php)

From our pictures we can see that manufacturer Terumo is the only one on a market that produces needles without a thread, therefore the holder can be used only with Terumo needles (Quick – Fit), which means that after the needle has been inserted into the holder, it cannot be removed again. Their holders come with safety shields or without them.

Figure 7: Terusafe Disposal Boxes (http://www.terumo-europe.com/laboratory/products/acc_boxes.php)

Figure 8: VENOSAFE HOLDER (http://www.terumo-europe.com/laboratory/products/acc_holders.php)

The holder from Figure 8 is compatible with Quick fit needle from Figure 6. Pressing the bayonet or by pushing the holder in the special QUICK FIT release aperture, disposes the needle safely into the TERUSAFE box, without touching the holder. (Terumo - Recommendation for use)

5   CONSLUSION

Based on a desktop research, we have found out that the companies indeed interpret the directive in different ways they manufacture various products which incorporate safety-engineered protection mechanisms in order to meet the Directives.

According to the purpose we examined the part of the directive, which applies to our case study. The aim of the research was achieved, as with a case study we found, that the companies produce a variety of products to provide devices with a built-in safety system.

Becton, Dickinson and company
They produce safety-engineered, multi-sample blood collection needles »Eclipse«, which go on a holder and can be reused. As we can see the »Eclipse« needles do not provide a product for single use, as a holder can be reused.

Greiner Bio One International AG

The company manufactures »VACUETTE QUICKSHIELD« Safety Tube Holder, which has a pre-assembled protective cap. User can choose the thickness of the needle. All the needles have a thread, which means that they need to be tightened into the holder. After use, the entire set has to be discarded because the needle is locked with a protective cap. This system is good as user can choose the size of the needle, disadvantage of this system is that the needle has to be threaded into the holder. We can say that this system meet the Directive.

The second product they offer, VACUETTE® PREMIUM Safety Needle System Tube-Touch is automatic product. If we look at Table 1: Safety-engineered devices, we can see that the WHO organization does not recommend automatics products because safety mechanism can be activated during blood drawn.

Terumo Corporation

Terumo is the only manufacturer on the market that produces needles without a thread, therefore the holder can be used just only with a Terumo needle »Quick – Fit«, which means that after the needle has been inserted in the holder, it cannot be removed, which means it provides SAFETY for a user. Terumo produces holders with a safety shield for a single usage (Figure 8). To meet the Directive, Terumo recommends Quick-Fit needle with a holder for multiple usage together with Terusafe Disposal Boxes (Figure 7), Quick Fit release aperture on the cap for safety disposal needle.

On the basis of the above facts it can be said that the aim of the research was achieved. Companies offer a variety of products to meet the Directive, therefore we accept our H1 which says that the interpretation of the directive differs from company to company (manufacturer of devices for vacuum blood collection). Which of the above mentioned products are appropriate to meet the Directive, are decided by a clients. A restriction of competition starts here. We can say that a market share of the companies depends on the representatives in each country. If the brand is well represented and advertised the sales of these products will be successful. Based on the results we can also accept H2, which speaks about the interpretation of the Directive to affect competitive advantage of companies that manufacture and market products for vacuum collection. Based on a desktop research, we have found out that the companies indeed interpret the directive in different ways, giving them a competitive advantage, or otherwise competitive disadvantage, which depends on legal representatives and legislation in every country.

For further research we recommend the exploration of the interpretation of the Directive according to a client's their response to the adoption of the Directive, which will drastically raise the cost of vacuum collection.

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PUBLIC UNIVERSITY MANAGEMENT UNDER NEW CONDITIONS OF CHANGE

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ABSTRACT
Economic crisis, limited resources, rapid globalization and growing competitiveness are the main factors influencing higher education institutions during the last decades. Expectations from society (all types of stakeholders: students, scientists, businesses, industries, government institutions, etc.) have enlarged goals of the university. Along with traditionally managed university goals of providing higher education studies and research, there is an emphasis on better higher education compliance with labour market and research transfer into commercialized investments of national economy. Along with that universities have to strive for international recognition and competitiveness. Along with these issues public university governance and management have become complicated and challenging, and along with enlarged decision making freedom, university leaders are faced with difficulties and problems in university management. The latest literature sources as well as European and other countries' experience demonstrate that one of the public university management challenges is a change from the traditional bureaucratic management approach to the New Public Management which emphasizes new management processes and approaches at the university institutional level. The purpose of the research is to identify and analyse new management processes and approaches for the university to reach its goals under the new conditions. University governance in this paper is acquisition of strategic directions, forms of decision making institutions, regulations, management ways and approaches at institutional level and higher education system level nationally and internationally in order to ensure university as public institution's goal oriented performance for needs of target groups (internal and external stakeholders – students, employers, entrepreneurs, industries, state and local government entities, etc.) By governance processes the author means institutionalized operational and strategic management activities which ensure effective functioning and development of an institution (university) in order to reach its goals. Research methods: literature analysis, data from the quantitative inquiry carried out at the universities of Latvia in Spring, 2012. Research results have indicated that serious improvements in personnel management, assessment and optimization of structures and functions, information flow and communication, internal and external cooperation, as well as improvement of leadership and management skills are necessary university management preconditions for the implementation of modern university goals.

Keywords: Goals, Institutional management, University

1   INTRODUCTION
In the context of repaid changes in society and its relationship with higher education, countries throughout Europe have responded in a variety of ways to the widespread need to re-think and re-design the governance structures of universities. Universities as public institutions are now accountable for their behaviour in new ways: they must show that they are responding appropriately to the needs of society; they must demonstrate that public funds they receive are being used responsibly; and they must maintain standards of excellence in higher education studies and research, the primary mission of higher education institutions.

Increased autonomy and accountability have brought about many changes which mark a shift away from traditional modes of academic self-government in a closed community of academicians and scholars (Higher Education Governance in Europe, 2008).

Higher education system in Latvia is fragmentized. There are more than 60 higher education institutions (public universities, public and private academies and colleges in Latvia (Higher education institutions in Latvia, LR CSP, 2012). 17 out of these are public higher education institutions. There are six public universities in Latvia, they are situated in the capital city of Latvia, as well as at the regions of Latvia. Public and private higher education institutions had approx. 939 study programmes which incorporated close to 100 000 students in study year 2011./2012 (Ministry of Higher Education and Science report, 2011). At the same time the number of employment age persons, incl. young people, is decreasing. Based on 2011 population census, there are 2 million inhabitants in Latvia, and 10 000 to 15 000 persons of employment age emigrate from Latvia annually (Central Bureau of Statistics, 2012). These facts raise issues concerning necessity of all higher education institutions and study programmes, more effective usage of higher education resources and quality assurance.

The majority of Latvian higher education institutions (including public universities) were not prepared for economic crisis, severe decrease of public resources, negative demography as well as rapid globalization and competitiveness in higher education. These factors have created crisis and have determined necessity for change in higher education in Latvia. During the upcoming years the higher education sector will face serious threats for sustainability, and overcoming of these threads will ask for serous and even radical solutions in higher education, including reforms at the institutional management level.

Foreign university researchers have emphasized the necessity for change in university management. That is justified by the fact that in order to implement university goals under conditions of rapid globalization and socio-economic crisis university governance have to undertake best management experiences from the public and private sectors (Wolf, 2011; Guerrero, 2010; Starratt, 2004; Anderseck, 2004). Successful university governance is characterized as management of institutional structures and processes in close compliance with changing external environment. Also, there is a challenge concerning shift from the traditional university self-governance decision making form to corporate or integrated governance which is more characteristic for the entrepreneurship (Brunner, 2011).

2   UNIVERSITY GOALS ANDER NEW CONDITIONS OF CHANGE

The university goals (Figure 1) of providing higher education studies and research are traditional, but nowadays there is an emphasis on better higher education compliance with labour market and research transfer into commercialized investments of national economy. Necessity for university to be open and active in state, city or regional social and cultural events is relatively new. University becoming an open public institution have to make cooperation with various social partners in order to better integrate their needs into university strategy implementation. All three goals of the university are covered by necessity to strive for international recognition and competitiveness in studies, research and social/cultural activities. Thus, considering university goals, the university governance have to be performed in a way that theoretical goals are implemented in practice.
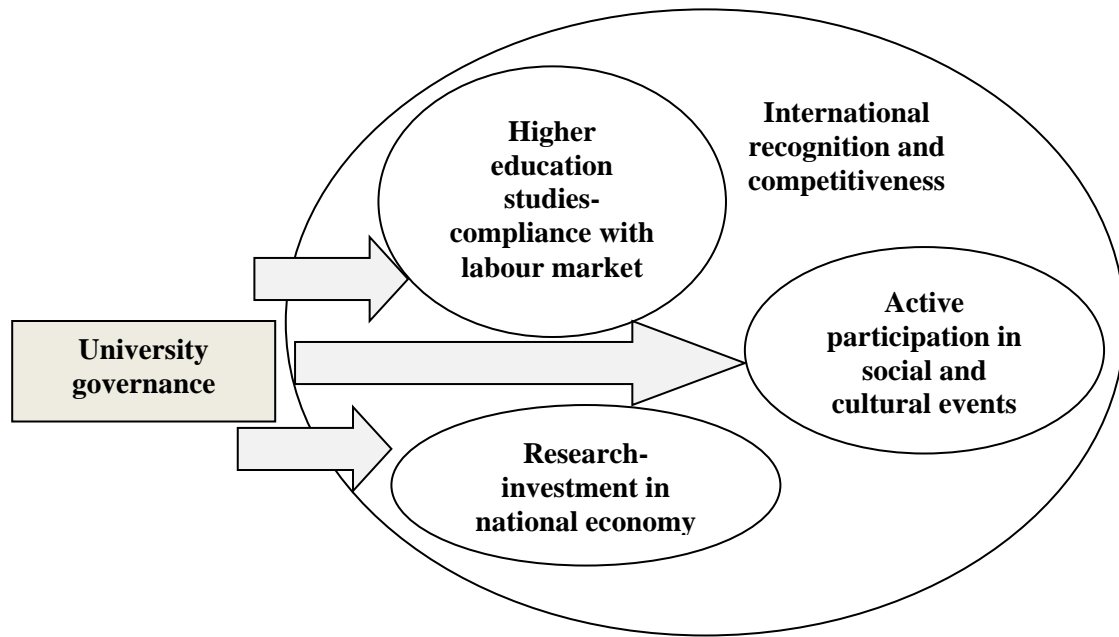
Figure 1: University goals under new conditions of change (author's developed by R. Hagen, R. Barnett, C. Rytmeister, S. Marshall, T. Christensen, B. Barker and EUA reports and findings)

The author has concluded that implementation of university goals in practice is complicated. This conclusion is supported also by various foreign authors, including European University Association (EUA) reports and findings. Because of increased university role, goals and functions, the university management have become larger in its scale and more complicated in its meaning. New management processes and approaches are necessary to implement university goals under new conditions of change.

3   CHANGE IN UNIVERSITY GOVERNANCE

Change from the traditional bureaucratic management approach to the New Public Management which emphasizes new management processes and approaches at the university institutional level is characteristic of universities in all Europe and other countries.

Higher education reforms, including university governance reforms lately have been researched by many authors in Great Britain (Trakman, L., Brown, R., Crellin, M. A., Chapleo, C.), Australia (Carnegie, G., Tuck, J., Rytmeister, C., Marshall, S., Smith, C., Bath, D., Blackman, D., Kennedy, M., Harman, K., Treadgold, E.), Germany (Anderseck, K., Norback, L. E., Henze, R), USA (Kezar, A. J., Jenicke, L. O., Kumar, A., Holmes, M. C., Starratt, R. J., Gallo, J. V., Nadler, D. P., Miller, M. T., Modica, J.), Finland (Linna, P., Pekkola, S., Ukko, J., Melkas, H., Aarevaara, T.) and other countries.

One of the latest higher education reforms which foresee radical changes in higher education system is the Finnish University Act, adopted in 2010. It has been stated that Finnish universities are about to enter a period of radical change. As in the case of many European countries, Finland has become used to inflexible higher education structures and a reactive university system. This has led to a heavily bureaucratised administration, slow decision

making and permanent funding deficiency in the publicly owned universities (Aarrevaara, 2009).

Latest research results highlighted university management challenges under new conditions of globalization, request for knowledge based economy and international competitiveness. Publications emphasize new university role, increase of its importance: „Harmonized higher education and science area have to be developed, based on strong, autonomous financially sustainable universities which are able to perform in a more complicated global environment" (EUA Annual Report, 2009, p. 7). „Conditions raised by globalization and knowledge based economy have changed the traditional role of university. Universities have to become target organizations of education policy making, universities are larger knowledge based institutions in cities and regions" (Hagen, 2002, p. 204).

One of endeavours to raise efficiency and effectiveness in public sector is to introduce New Public Management Theory (NPM). NPM is popular and widespread in Europe and other countries, the ideas of this theory have been researched by various authors (Boston, 1996; McLaughlin, Osborne and Ferlie, 2005; Pollitt and Bouckaert, 2000; Ingraham, 2001; Vanags, 2007).

Summarizing author's ideas on possibilities and challenges to introduce NPM in public sector institutions, it has been stated that public institutions (including public universities) following classical bureaucratic management principles are not able to ensure achievement of goals and performance results in accordance with society needs under new conditions of change. NPM principles are introduced in public organizations by emphasizing the following principles of governance (Osborne and Gaebler, 1992; Comparative Public Administration, 2000):

- Management leadership, professionalism and competence;
- Support of management innovations, ability to be flexible, striving for quality and excellence;
- Achievement of goals, strategy and tasks in accordance with society needs;
- Systematic and consistent analysis of efficiency and effectiveness, its controlling and measurement;
- Improvement of horizontal communication and cooperation;
- Accountancy and transparency of management work, etc.

These principles of governance are crucial also in public university governance.

4 RESULTS FROM QUANTITATIVE INQUIRY CARRIED OUT AT UNIVERSITIES OF LATVIA

The author carried out quantitative research – inquiry at the public universities in Latvia in Spring 2012. Different level managers (higher, medium and lower level) were respondents of the inquiry. The total number of respondents were 209 people (n=209). The aim of the inquiry was to research what are management processes and approaches in public universities and what is their compliance with modern management principles. Respondents' answers (scale 1 to 10 and in some questions – scale 1-5) were divided into three groups: 1st group - "strongly disagree, disagree, rather disagree" (answers in a scale 1,2,3,4); 2nd group – "doesn't have a clear opinion, lack of information" (answers in a scale 5,6); 3rd group – „strongly agree, agree, rather agree"grupā (answers in a scale 7,8,9,10).

Almost equal number of respondents were of opinion that a board with external stakeholders have to be introduced/shouldn't be introduced as university decision making body (Chart 1).
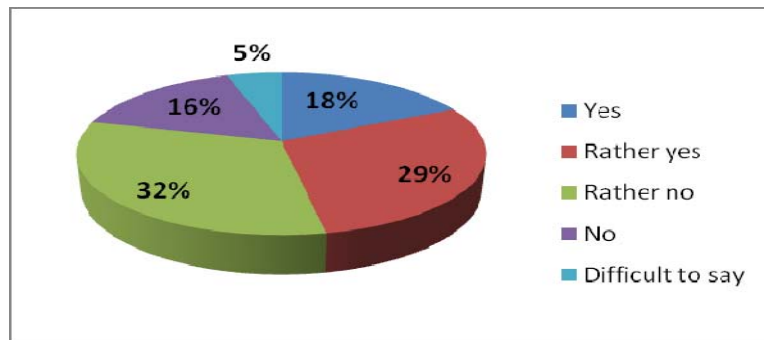
Chart 1: Responses (%), Do you think that a board with external stakeholders have to be introduced as university decision making body? – n=209 (author's research in Latvian universities)

Those who demonstrated a positive opinion regarding this issue were of opinion that a board with external stakeholders would increase university linkage with entrepreneurship and industry, university performance results would be in better conformity with labour market needs, and it would make university governance more professional by decreasing management preconceptions and stereotypes.

Respondents who were of opinion that a board with external stakeholders shouldn't be introduced as university decision making body were of opinion that it is enough that external stakeholders take part in university advisory bodies, external stakeholders lack knowledge on university management specifics, and higher decision making power has been successfully implemented by university senate.

Other results obtained from inquiry:
- More than half of respondents (64%) were of opinion that reforms in university institutional governance are necessary in order to implement university goals under new conditions of change;
- Majority of respondents were of opinion that the number of administrative personnel is too big and it is not proportional with decreased number of students in latest years;
- Majority of respondents (39%) didn't have opinion regarding issues concerning planned, consistent training and improvement of professional skills of administrative personnel, and 37% of respondents were of opinion that administrative staff does not have enough training;
- 39% of respondents were of opinion that assessment of knowledge and skills of the administrative staff is carried out on a regular basis, 34% of respondents were of opinion that assessment of administrative staff is irregular and insufficient, and 27% didn't have opinion regarding this issue;
- Although more than 60% of respondents were of opinion that university higher level managers support management innovations, higher level university managers have management competence and leadership skills, they undertake responsibility of their decisions, and evaluate university performance results, comparatively high percentage (11%-29%) of respondents didn't agree to these statements;

- 27% of respondents were of opinion that they can't influence university strategic management processes. That may lead to assumption that middle and lower level managers are not involved in strategic management decision making processes;
- 69% of respondents were of opinion that support functions are not outsourced;
- More than 30% of respondents were of opinion that decision making processes and systematic and consistent problem solution activities are insufficient;
- More than 20% of respondents were of opinion that university management have problems with planning, performance effectiveness and efficiency, analysis, assessment and monitoring.
- More than 25% of respondents were of opinion that university management information flow is insufficient and that usage of material and technical resources is not enough productive;
- Based on the results of inquiry, the author proposed several recommendations to the higher level university managers regarding university management issues:
  - (1.) Number of administrative staff, their functions (duplication of functions, uneven work load), qualification and annual assessment have to be reviewed and reconsidered;
  - (2.) Improved implementation of recommendations proposed by performance audit and quality audit;
  - (3.) Re-organization and optimization of institutional structures, outsourcing of support functions;
  - (4.) Improved financial management, especially such issues as attraction of private financing, increased possibilities of self-income, calculation of costs concerning performance results and transparency of financial management systems.
  - (5.) Improved information and communication flow and access to all level university managers and employees;
  - (6.) Participation of all level university managers in strategic management decision making processes.

The results of the inquiry partly support the thesis raised at the beginning of the research (doctoral thesis "Governance processes as a factor influencing university effectiveness") - „University management processes are not enough effective. That is supported by insufficient knowledge and skills in managing university as autonomous public institution, unwillingness to make reforms and outdated management approaches." Respondents' opinion regarding majority of questions were balanced in negative, positive and „don't have opinion" answers. That draws to a conclusion that universities have serious management problems, including insufficient information and communication flow and access on important management issues to all level university managers. Thus, many issues concerning university management have become critical or may become critical in the nearest future.

5 CONCLUSION
The theoretical basis of higher education, incl. university governance reforms is developed by New Public Management (NPM) theory. That supports statement that universities are part of the public sector and best ideas and practices from the public sector management experiences have to be introduced also in university governance.

Based on public sector and university researchers' conclusions, management leadership and support to management innovations, implementation of strategy, goals and tasks in accordance with society needs, management professionalism and competence, horizontal

communication and cooperation, systematic and consistent assessment of efficiency and effectiveness, management accountability and transparency are the main governance processes of a modern public institution, incl. public university, under new conditions of change.

Introduction of a board with external stakeholders as a university decision making body is a popular and widespread concept in European and other countries' universities, but there is no a united opinion about advantages and disadvantages of this corporate or integrated university governance form in Latvia. On the one hand, the board could be a good solution to professionalism of university governance (representatives from entrepreneurship with management competence would be included), as well as that would increase university linkage with national economy and society in general. On the other hand, a threat may occur that university performance is a subject to political or private interests.

University governance reforms are actual in European and other countries' as well as Latvian universities. At the same a united European university governance reform is not possible, because university governance structures develop differently across all Europe. United university governance reform in Latvia would be possible if all internal and external stakeholders unite in a common goal, but currently stakeholders (responsible ministries, social partners, students, university managers) have different opinion on necessity of governance reforms.

University higher and middle level managers' insufficient competence on optimization and change of governance structures (change management) is one of the reasons why university governance reforms are not implemented in Latvia.

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JOB SATISFACTION AND MOTIVATION OF EMPLOYEES: A CASE STUDY IN SERBIAN ORGANIZATIONS

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ABSTRACT
The paper will examine the most relevant factors that influence job satisfaction, with the example of several organizations from different sectors. Motivating employees and creation of satisfaction are the most important activities of management and leadership in the organization. Since those are sensitive mechanisms, particularly in terms of personality traits, attitudes and expectations of individual, the paper will analyze these factors, critical for motivation illustrated by organizations practice where the research was conducted.

Keywords: Management, Motivation, Organization, Satisfaction

1 INTRODUCTION

The study of variables and determinants affecting job satisfaction of employees is vibrant and dynamic research field in recent years and represents subject of raising interest among scientists. Job satisfaction is analyzed from the standpoint of indicators, as well as consequences and potential influence on organizational and individual behavior of employees. Growing interest for work attitudes of emloyees is justified by the fact that in contemporary business environment human resources and knowledge are becoming key sources of acheiving and maintaining competitive advantage. Another reason is that employee's commitment to the organization is dependent upon degree of job satisfaction. Therefore, it is important to find out which job dimensions contribute the most to job satisfaction, and identify others, perceived as a source of employees' discontent. In this context, special attention should be payed to personality traits that influence and shape a number of organizational behavior variables, as well as characteristics of the job and the organization, affecting job satisfaction.

One of the most important effects of higher job satisfaction is higher level of employees motivation. Motivation is the cornerstone of modern human resource management, having in mind fact that creation of effective motivation mechanism can help organization to improve competitive position (Robbins and Coulter, 2005, p. 392).

Job satisfaction and employees' motivation can not be regarded only as psychological and sociological aspects of organizational behavior, since they directly affect other dimensions of organization and overall company performances. Incentives for individual behavior originate from internal psychological driver fostering him to act, and as a result his work performance

is affected not only by his ability but to a large extent by his motivation, in other words his job sattisfaction.

The *research goal* of this paper is to point out and analyze the most important factors influencing job satisfaction, positive effects of higher satisfaction, as well as testing of theoretical propositions and deliberations within business practice of several Serbian companies. Accordingly, work paper structure has been devised. Firstly, job satisfaction factors are presented, with speciall attention given to main personality traits, followed by analysis of job satisfaction effects. Finally, the results of research conducted in several Serbian enterprises are explained, reffering to employees attitudes in respect of the particular dimensions of job satisfaction.

2 JOB SATISFACTION FACTORS

Job satisfaction reffers to attitude toward work incorporating cognitive (certain assumptions and beliefs about job), affective (feelings towards work) and evaluative (work perception) individual reactions of individual employee. Job satisfaction is resulting from compliance between objective working conditions and employe's expectations. Employee, for instance, may be dissatisfied with salary, position or status, but in the same time to be relatively satisfied with job, due to relatively low expectations. Conversely, an employee may be dissatisfied inspite of high salary, if his expectations are not primarly related to money compensations, but for interpersonal relations with colleagues or promotion opportunities. Numerous factors influencing job satisfaction are usually classified in two categories: those related to the characteristics of organization and job, and those related to the personal traits of the employees (Robbins, 2003, p. 352).

There are several organizational factors that are associated with the employees' satisfactionf: job characteristics, reward system, working conditions, working environment and organizational structure (Janićijević, 2008, pp. 92–93).

Job characteristics – job content is reffering to a scope, variety, work autonomy, complexity and the consistency, and, as such, can cause both, satisfaction as well as dissatisfaction of employees. In general, people tend to be much more satisfied if they find their job to be intelectually challenging, unstructured, creative, in comparison with simplistic, repetitive, routine work, with little or none aythonomy.

Reward system - this factor is one of those most directly affecting employees satisfaction. Combinations of tangible and intangible compensations and incentives are designed aiming to achieve job satisfaction, which ultimately reflects on motivation, productivity, efficiency and overall performance. Tangible, material forms of rewards are: financial compensations, raise or bonus, but indirect gains that contribute standard of living improvement (various perks and various benefits), too. Intangible rewards incorporate nonfinancial compensation, and these are: respect, challenging job, status, opportunities for career development and promotion. It should be noted that employees often regard impartial and fair implementation of reward system as more important, comparing to the amount of remuneration (Bogićević, 2010). Rewarding employees is a tool for encouraging creativity, achieving higher performance, increase responsibility and willingness to participate. Conversely, arbitrarly implemented reward system may become main cause of discontent, especially if employees perceive it as unfair.

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Working environment - pleasant working conditions are foundation for higher efficiency in performing daily duties and achievemet of expected results. Employees are satisfied if they work with colleagues whom they are having good interpersonal relations with, in other words in postive working environment. In several studies employees said that they would gladly trade a part of material compensation for motivating working atmosphere. They also highlighted that they prefer frendly working environment over well payed job in hostile conditions (Stojanović Aleksić, 2007, p. 305).

Organizational structure. Organizational structure affects job satisfaction through parameters, primarily centralization and decentralization. Centralization will have a positive impact on employee satisfaction if they are reluctant or unwilling to participate in decision making process, while it can cause disssatisfaction if employees expected authority to be delegated and demonstrate willingness to take responsibility. Centralization and decentralization effects on job satisfaction are determined by the nature of the work, employees expectations, as well as national cultural characteristics. In countries with high power distance, centralization is accepted as normal practice and people will not demostrate disssatisfection if it exists in their company. National culture characteristics define relationship with other structure parameters, meaning that some cultures have more direct propenstity to control, high formalization, functional structure, while others favor informal communications and team structure (Sapic, Eric and Stojanovic Aleksic, 2010).

In addition to organizational factors, there are a number of personal trait that influence job satisfaction, too. Job satisfaction and professional success lead to a pleasant emotional status of the individual, boosting his selfconfidence. Personal factors that influence job satisfaction are: compliance of professional and personal interests, working experience and position, status and overall life satisfaction.

Compliance of professional and personal interests - studies have shown that higher corespondence of personal and professional interests is leading to increased job satisfaction. In fact, numerous studies have confirmed that the nature of the business is one of the most important factors producing positive work attitude of employees. This does not imply that a well-designed compensation system is irelevant, but that higher job satisfaction can as well be acheived through interesting and challenging work design, compatible with the employee's personal preferences.

Work experience and position - employees develop on daily basis, gaining work experience. Work experience includes managing social relationships, managing problems, tasks and other challenges employee is facing. Job satisfaction is changing during time. Generally, it is estimated that people tend to be happier at the beginning of career, then level of satisfaction slowly decreases and finally increases again as retirement is approaching. Also, employees will be more satisfied if his position provides higher influence on decision-making process and social influence; factors usually associated with mature career and significant work experience.

Overall life satisfaction - without going into the philosophical deliberations about the purpose of human life, it is evident that the circumstances person lives in reflect on his job satisfaction. Researchers assume that there are three types of relationships between job and life satisfaction: 1) overflow, when business and personal life of individual overlap, 2) segmentation, when business and life experiences are separated and have little or no

connections, 3) compensation, where the individual is seeking to compensate job dissatisfaction with fulfilled and happy personal life, or *vice versa.*

3 PERSONAL TRAITS AS A JOB SATISFACTION FACTOR
The way people perceive their work and its aspects, to large extent depends their personal traits. Personal characteristics directly affect the sense of satisfaction and dissatisfaction, shaping the individual perceptions, and perception of specific work experience aspects as satisfactory or unsatisfactory. Employees create innovative ideas, overcome rigid organizational hierarchy, make necessary modifications and strive to obtain key resources and support for their implementation (Eric and Stojanovic Aleksic, 2010).

Researchers dealing with personality generally reached consensus on its structure, and today most of them as set of dimensions that can describe each individual accept the five-factor model, or a model called *'big five'* (Janićijević, 2008). According to this classification of personality traits, all features are classified into five categories: extraversion (introversion), friendship (agreement), conscientiousness (responsibility), emotional stability (neuroticism), and curiosity.

Each of these traits represents combination of multiple factors. Thus, extraversion, characterized by positive emotional approach, incorporates friendship, entrepreneurial spirits, ambition, while the emotional stability reffers to emotional reactivity, sensitivity and level of security. Friendship usually relates to kindness, cooperation and wilingnes to help, while conscientiousness reffers to components such as the need for control (vs. impulsivity), prudence, reliability, achievement and propensity to hard work. Curiosity, as well as the previous four traits is a mixture of various components of personality, intellect in the narrow sense (intelligence, ingenuity, creativity), openness to experience (imagination, liberalizm), and some aspects of culture, personal attitudes, preferences and orientations (for instance artistic interests, non-conformism, unconventional and progressive values, the need for diverse experiences). Conditions for success is persistence, but endurance in overcoming obstacles, too (Zimmerer and Scarborough, 2002, pp. 28–31).

Apart from these, other personality traits are essential for human behavior in organizations, too. Recognizing their existance can improve understanding of individual differences and pointing out possible ways of influencing other people behavior, as well. Some of those traits follow (Janićijević, 2008):
- *locus of control* – reffers to degree person belives he can influence and control his own destiny. People differ significantly on this matter, some of them believe they are in control of their own life, while others have more deterministic approach, beleiving that their destiny is predetermined and there is no much they can do about it;
- *machiavellizm* – to whtat extent person behavior in defined and consistent with the principles of pragmatism, arrogance and opportunism;
- *self-esteem* - the extent to which man recognizes and respects himself and his abilities;
- *risk propensity* - the degree of individual willingness to take risk.

These traits are interrelated and influence each other: people with internal locus of control believe that they can influence their fate, and are, therefore, more willing to take more responsibility and higher risk, since they are primarily oriented proactively, toward future. They are willing to take initiative, identify and solve problems, and have higher self-esteem comparing to people with external locus of control, who believe that their life is

predetermined and heavily controlled by higher authority. Employees with an internal locus of control are less perceptive to coercive and manipulative influence techniques, they easily accept mistakes and don't consider them as bad luck, but the possibility for learning (Stojanovic Aleksic and Babic, 2012, p. 94). Generally, they are more satisfied if their job is in compliance with their personal characteristics. People with an internal locus of control are focused on the positive outcomes and have higher ability to experience job satisfaction; however, care must be taken not to cross the boundaries of the real optimism (Antes and Mumford, 2012).

Finally, important traits that should be considered in analyzing employees' behavior and level of satisfaction, are demographic characteristics, age, gender and marital status. For example, it is considered that age affects people's behavior in terms of higher satisfaction, productivity and reduced likelihood of leaving the organization. Considering gender, research studeis provide evidence that women are easier to comply than men, they are more sensitive, but more ekstrovert and willing to demonstrate empathy, while men are more aggressive, determined and more likely to take risk (Rosenber, 1999, p. 124).

All above mentioned characteristics can affect the level of job satisfaction and motivation mechanisms. What motivates extroverted, curious and empathetic individual is certainly different from the motivation mechanisms of intravert, emotionally unstable and rigid person. Likewise, attitude toward life, environment, personal values, will certainly contribute to certain aspects of the job to be ranked as satisfactory or unsatisfactory, and therefore will affect employee motivation.

4 JOB SATISFACTION EFFECTS

Job satisfaction is not a goal in itself. Although there are raising theories claiming that social responsibility involves the tendency to keep employees as important stakeholders satisfied, representing internal aspect of corporate social responsibility (Stojanovic Aleksic and Domanović, 2012). However, there is general agreement that purpose of satisfaction is increased motivation and performance of both, employees and the entire organization. Better focus on the goals, increased work effort, superior performance, and higher organization commitment are results of higher motivation (Mitchel, 1997, p. 63).

Job satisfaction is related to their work, and can result in several basic effects (Janićijević, 2008):

- *Productivity*. The assumption is that there is a strong correlation between satisfaction and employee productivity, meaning that employees will be motivated to make greater efforts, resulting in higher productivity.
- W*ork absence*. More satisfied workers will be less absent, which was confirmed in empirical research studies. Vice versa, there is no clear correlation regarding relationship between less satisfaction and higher absence (anxiety caused by possibility of losing job or sense of responsibility can cause even dissatisfied employee to be rarely absent from work).
- *Job fluctuations*. It was found that it is less likely that satisfied workers will leave job, comparing to dissatisfied colleagues. It is also established that whether or not employee will live his job depends upon other factors as well, for instance overall life satisfaction.

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It is believed that these positive effects are achieved, directly, as a result of higher motivation, and indirectly, through organizational commitment, representing one of the most significant consequences of job satisfaction (Newstorm, 2007, p. 221). Organizational commitment refers to positive attitudes of employees toward the organization and co-workers (a group of employees), as opposed to job satisfaction, referring to positive feelings toward job itself.

Employees' referent objects of commitment can be defined at two levels, the organizational and group commitment. When considering commitment of employee to organization, it is possible make distinction between dedications to organization per se, as well as dedication to management. Similarly, if we look at the individual commitment to a group, we can distinguish dedication to close associates, to group or immediate superior.

Organizational commitment of employees at any level may result from many sources. It can be preference toward safety, compliance of individual and organization goals, as well as feelings of obligation of the responsibility and loyalty. Orientation to safety means that the employee is committed the organization due to long working experience and personal investment, aware of risk that in case of leaving work connections and position will be lost, and he would have to face uncertainty of finding new job. An employee may be dedicated to organization because he believes that the realization of the organizational goals is the best way to achieve his own, individual goals. Employee may feel that he has obligation to remain in the organization, and to invest his knowledge, energy and time. However, most durable and strongest organizational commitment exists when it occurs as a result of job satisfaction.

In addition, factors that influence job satisfaction level (job characteristics, organizational factors and personal traits) to great extent overlap with those affecting organizational commitment. Therefore, it is considered one of the most important effects resulting from job satisfaction is high organizational commitment, manifested in higher levels of motivation and productivity, less work absence, reduced staff fluctuation etc.

5 CASE STUDY

For the purposes of this study survey was conducted, about employees' attitudes and job satisfaction, and certain aspects of motivation theories were examined. In this study three companies in the city of Kragujevac were analyzed, one in the field of public administration (A), second public entity (B) and third profit organization (C). Interview was data collection method. Liquert 1-5 scale was used in filling out questionnaire. The research included a total of 51 respondents, 19 men and 32 women. Analysis of the obtained data revealed common characteristics of organizations that are the subject of research, but in the same time enabled relevant comparisons and making adequate conclusions. Number and structure of respondents is displayed in Table 1.

Table 1: Sample size and structure

Compa ny	RESPONDENTS			EDUCATION LEVEL					Average age of responde nts
	Me n	*Wome n*	*Tota l*	*Universi ty degree*	*Vocation al educatio n*	*High school graduat e*	*Othe r*	*Tota l*	
A	10	22	32	20	5	6	1	32	49,10
B	3	8	11	7	2	2	-	11	35,27
C	6	2	8	5	1	2	-	8	35,25

When it comes to employees' personality traits evaluation, it is interesting that in all three organizations women demonstrate higher levels of extroversion, kindness, conscientiousness, emotional stability and openness, comparing to men. This applies to Machiavellian behaviour and internal locus of control, as well (Tables 2 and 3).

Table 2: Propensity to machiavellizm

Company	*Percent of respondants with propensity to machiavellizm*	*Women (%)*	*Men (%)*
A	31,25	80,00	20,00
B	63,64	71,43	28,57
C	50,00	25,00	75,00

Table 3: Propensity to internal locus of control

Company	*Percent of respondants with propensity to internal locus of control*	*Women (%)*	*Men (%)*
A	74,25	56	34
B	34,64	58	42
C	53,25	59	41

It can be concluded that the highest level of Machiavellian characteristics demonstrate employees in company B. This has to do with the lowest perception of job security, in this very company (Table 8), shows the Machiavellian attitudes of employees in the attempt to keep the job. On the other hand, this company has the lowest percentage of employees with internal locus of control, they don't believe that they are responsible for life achievements, which can be regarded as a consequence of high job and promotion uncertainty. Regardless of that, the employees at company B highly appreciate strong interpersonal relationships with colleagues, while other aspects of the job are graded relatively low. Table 4 depicts average grades respondents have given to different job/organization aspects.

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Table 4: Respondents attitudes toward different job/organization aspects

Job aspect/organization	A	B	C
Salary	2,44	2,91	2,37
Working autonomy	3,75	3,18	3,63
Safety	4,84	3,73	2,63
Learning possibilities	3,00	2,81	2,14
Promotion possibilities	2,31	2,91	2,71
Interpersonal relationships	4,13	4,45	4,00
Conflict absence	3,75	3,80	4,43
Challenging job	2,78	2,60	3,14
Working conditions	2,71	2,40	3,13
Relationship with superior manager	4,06	3,50	4,65
Overall satisfaction	3,41	3,40	3,75

It is possible to conclude that all three observed organizations, the highest marks are granted to aspects of interpersonal relationships (relationships with colleagues, the absence of conflict, relations with superior manager), and the lowest scores are related to the level of salary, promotion and learning opportunities. Even though the grades in company C in general were the lowest comparing to other two organizations, overall level of satisfaction of employees is highest. Possible explanation is related to fact that employees cherish the most working relationships, and obviously demonstrate high level of social needs. This conclusion is also corroborated by the data presented in Table 5.

Table 5: Different types of needs assessment

Company	Basic needs	Social needs	Need for development
A	3,84	3,74	3,43
B	3,50	3,60	4,00
C	3,50	3,75	3,60

The above table presents data on how much importance employees attach to specific groups of needs (classification of needs was used according to *model of motivation Alderfer ERG*). Comparing the data in Table 5 with the average respondents age in Table 1, we can infer that employees approximately 35 years old pay relatively higher attention to the development needs (B and C), while employees with an average age of 50 years (A) are focused on maintaining standard of living in terms of basic needs, meaning that in this career phase they have already reached desired level of development needs, and confirms thesis that work experience and age are in positive correlation with job satisfaction. However, the average scores of needs assessment shows that the social needs are evaluated slightly higher in all three organizations, comparing to basic and needs for development. Table 6 presents the respondents degree of satisfaction to certain job aspects.

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Table 6: Respondents attitudes toward different job aspects

Aspekt posla	Dissatisfied	Not dissatisfied	Not satisfied	Satisfied
Company policy	19,60%	27,45%	37,25%	15,70%
Control	8,00%	42,00%	34,00%	16,00%
Interpersonal relations	4,00%	21,60%	5,90%	68,50%
Relations with manager	3,95%	29,40%	11,75%	54,90%
Acknowledgments	15,90%	45,45%	25,00%	13,65%
Promotion opportynities	23,50%	47,05%	21,55%	7,90%
Achievements	7,85%	56,85%	19,60%	15,7%
Proffesional development	8,00%	36,00%	44,00%	12,00%

It is evident that the most important source of satisfaction are interpersonal relations, followed by relations with managers (corresponding with previous findings on the evaluation of social needs.) Major source of dissatisfaction is company policy, control and professional development.

Finally, overview of results on the importance of job security for employees is shown, as well as the average rating of the perceived safety of current employment.

Table 7: Respondents attitudes toward job security relevance and safety perception

Company	Job security relevance	Average rating of the current employment safety perception
A	4,45	3,60
B	4,60	2,90
C	4,87	3,50

Table 7 provides evidence that employees give highest possible grades to of job security. This leads to conclusion that job security is considered as one of the most important factors of job satisfaction and motivation in Serbian companies. This is understandable if we take into account high unemployment rate and enormous impact of the global crisis, so employees feel constantly anxious about possibility of losing job. Average rating of job safety perception in all organizations is low, employees believe their position at work is uncertain, regardless of real possibility of losing job.

6   CONCLUSION

Managing employee motivation is one of the most important responsibilities of a manager, and main prerequisite of high motivation is job satisfaction. It is influenced by many factors, organizational and personal, such as the job characteristics, working environment, relationship with colleagues and managers, experience, personality traits, etc. The effects of high job satisfaction are multiple. They are reflected in the increased organization commitment and productivity, improved performance, reduced employee fluctuation, increased work effort and goal orientation. Although the motivation of employees is influenced by many factors, the

most effective form of motivation is to create an environment in which employees will be happy and motivate themselves (Certo, 2008, p. 382).

Multiple case study in Serbian organizations provided evidence that most of the factors of job satisfaction are common to all three organizations, meaning there is no significant difference in the evaluation of various job satisfaction aspects. National culture characterized by high power distance, collectivism and low uncertainty tolerance implies bureaucratic organizational culture characterized by pronounced hierarchy, subordination, centralization and resistance to change (Stojanovic Aleksić, Babić and Erić, 2011). The most relevant job satisfaction aspect is social, for instance interpersonal relationships with colleagues and managers, and the needs for development, related to the promotion and recognition. Lowest rank has job security, despite the fact that it is considered one of the single most important job aspects in Serbian organizations.

In facing the future, managers must learn analytical thinking in unpredictable and complex situations (Gold, Thorpe and Mumford, 2010). Further research in this area will have to incorporate increased number of organizations and participants in an effort to define more precisely which job aspects are the most important for creation of effective incentive mechanisms to motivate employees, especially in the context of the crisis affecting Serbian and global economy.

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EDUCATION FOR CREATIVITY: MOTIVATION AND LEARNING

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ABSTRACT

This presentation explores motivation as it is related to teaching and to the workplace. As Yoshida et al., suggest, motivation is related to a variety of educational outcomes which include curiosity, persistence, motivation and performance (2008, p. 1401). As such it is an internal state that may be effected by external factors which in turn "arouse, direct and sustain behaviour" (Tan, 2009, p. 156). Motivation is also related to calibration. As Hallinan states, "Calibration measures the difference between actual and perceived ability. If you're as good as you think you are, then you are said to be well calibrated. If you are not as good as you think you are, then you are said to be poorly calibrated" (Hallinan, 2009, p. 155). Consequently in the educational enterprise (or in any learning task) it is preferable that the learner starts of in a well calibrated condition. This will entail a reasonably realistic view of their learning competencies and be less likely to result in demotivation from negative feedback should these learning competencies by too widely calibrated. Secondly, a well calibrated individual is more likely to respond to the conditions of optimal motivation that are possible in the learning situation of a self-determined learner. Related to calibration is the fact that students and employees can be motivated when they do not perceive contingencies or opportunistic incentives or barriers between actions and outcomes (Yoshida et al., 2008, p. 1401). Diminution of autonomy may lead to mal-adaptive consequences (Deci, 1996, p. 31). Whilst in everyday life it serves as justification for service and job performance, morally it is not in itself self-justificatory. In the teaching context, Gardner and Lambert (1972) describe motivation as persistence that is shown by teachers and learners in the learning environment towards achieving a learning goal. In both the teaching and business context a distinction can be made between intrinsic motivation (behaviour for its own sake) and extrinsic motivation (behaviour as a means to some external reward) (Bektas-Cetinkaya and Oruc, 2011, p. 72).

Keywords: Education, Motivation, Teaching

1 INTRODUCTION

An integral part of any learning requires motivation for that learning to take place. Motivation is not only a feature of student learning but also of classroom instruction and moreover the interactive teaching techniques that are part of the classroom learning experience. As Pintrich states, motivation is derived from the Latin verb *movere*, meaning 'to move' (2003, p. 699). As Dykstra et al. suggest, "Students who are intrinsically motivated engage in an activity for enjoyment, to learn, and/or out of a sense of accomplishment, while extrinsic motivation arises out of a need to be rewarded, for example with a higher grade, or to avoid a penalty." (2011, p. 2). The 'control theory' of motivation assumes that people are compelled to act from the "promise of reward or the threat of punishment" (1996, p. 1). This is consistent with the behaviourist concept of stimulus and response, however peoples' and particularly educationists' cognitive complexity reveals that there is far more to motivation in learning than 'sticks and carrots'. There is continued debate of whether there is a motivational 'ethic' but in as much as motivation is an inherent part of human nature, everyone has a right to find motivation – a willingness if not inherent justification to act towards a particular goal. Although people are conditioned by their environment there is a difference between acting for

others and acting from 'free will' in accordance with one's own volition. As Deci suggests (1996, p. 2).

When autonomous, people are fully willing to do what they are doing, and they embrace the activity with a sense of interest and commitment. Their actions emanate from their true sense of self, so they are being authentic. In contrast, to be controlled means to act because one is pressured. When controlled, people act without a sense of personal endorsement. Their behaviour is not an expression of the self, for the self has been subjugated to controls.

However, what is widely known is that there is a significant correlation between intrinsic motivation and academic achievement (Goldberg and Cornell, 1998). Conversely as Deci explains, "[m]otivation requires that people see a relationship between their behaviour and desired outcome, and instrumentalities are the linkages that allow people to see these behaviour-outcome relationships" (Deci, 1996, p. 59). This linkage can in some circumstances (more remotely) be economic or intrinsic (by affective bonds). Motivation and its associated affective elements is one of the most important factors in students' learning and academic performance which is implicit but seldom formalised within teaching pedagogy. Motivation is commonly defined within the teaching and learning environment as the inter-relation of motivational beliefs (the inherent value of tasks) with achievement emotions (such as enjoyment, boredom or anxiety) and academic performance and hence also in the workplace (Artino et al., 2010, p. 123). Motivation has given some educators pause to reflect on the appropriate theories of mind which might encompass motivation in the teaching and learning process. In this respect the main challenge to the 'information processing' model of learning has come from the necessity to include more subtle emotions and intentional beliefs in the learning process. Social cognitive theory holds that human functioning results from 'triadic, dynamic and reciprocal' inter-relation of behaviours (individual actions and choices) with personal factors (beliefs, intentions, and expectations) and factors in the physical and social environment (Artino et al., 2010, p. 1204). According to this model task value is balanced with self-efficacy. Task value involves students' beliefs of how relevant or interesting an activity (such as a course module or a qualification) is to them, whereas academic self-efficacy involves beliefs about the inter-relation of student's self-assessment and outside reinforcement of their ability to perform academic tasks (Artino et al., 2010, p. 1205). As Botkin et al., suggest academic learning requires a shift from maintainence learning (acquiring knowledge do deal with cuurent issues) to dynamic learning (requiring development of new ideas) and this experience can be in itself highly motivational (1979). By comparison the control-value theory of motivation defines achievement related emotions as 'internal affective rewards' which are associated with completion of learning tasks. This emotional self-evaluation may vary from enjoyment associated with new learning, to anxiety in completing a specific task to frustration and disappointment if the result is disproportionate to the effort involved (Artino et al., 2010, p. 1205). Consequently motivational beliefs defined in terms of task value, self efficacy are correlated with course or learning-activity elated enjoyment and anxiety in learning activities (Artino et al., 2010, p. 1205). Task value beliefs are therefore reasonably accurate predictors of learning satisfaction or boredom. If a learning task or course is believed to be useful, relevant and important students are more likely to feel motivated to task completion by their enjoyment of it (Artino et al., 2010, p. 1210).

1.1 Emotion and motivation

Emotion and affect are described as 'feeling[s], emotion[s] or desire[s], especially leading to action' (Sikhwari, 2007, p. 523). Students who are confidant of their learning and of their

learning environment are less likely to be disadvantaged by experiencing the inhibitory effects of anxiety in the learning performance. Enjoyment of the learning process is positively associated with successful educational outcomes whereas boredom and anxiety are negatively associated with academic performance. Consequently it behoves teachers to provide motivations inspiration in learning environments as well as subject content and the application of teaching pedagogy wherever possible. It is useful for teachers to find ways to enhance the inter-relation between self-concept, motivation and academic achievement (Sikhwari, 2007, p. 520). Understanding of motivation takes place in the context that most teaching pedagogies emphasise cognitive factors at the expense of affective factors. In this context intelligence is seen as the prime contributor to student success however, increasingly the affective component of learning – what teachers and students feel about themselves in relation to the learning task is increasingly important. Increasingly affective factors play a critical role in the motivation, attitude and self-concept of students. Higher achievement is associated with optimal attitude and positive self-concept and efficient use of study time whereas students who have a negative attitude may impose limitations on their achievements (Sikhwari, 2007, p. 521). Whether students see themselves of having ability of feeling successful or failing, of being accepted or rejected, have having positive emotions in the learning environment – such as happiness, joy of learning, self-satisfaction, reciprocity – or whether students feel defeated influences aspects of behaviour or learning (Sikhwari, 2007, p. 521). Sikhwari suggests that the main influence that high motivation has on students is in giving them the ability to effectively select and persist in information processing (2007, p. 522). If a student is motivated and interested then there is an increase in depth of processing, memory, knowledge acquisition, attention and comprehension (Sikhwari, 2007, p. 522).

1.2   Self-concept and motivation

A student or employee's self-concept is central to their understanding and perception of the learning process, it refers to a set of ideas that a student may believe about him or herself which exists on a continuum of positive and negative effect. As (Teoh et al., 2009, p. 721) suggest, factors related to personal beliefs include: "significance of learning, confidence, interest, efforts, family support, independence, self-direction, teacher's attention". In this context, although affect can have a large effect on student motivation it is more dangerous when unaccompanied by conscious cognition and the possibility for remediation through the introduction of motivational elements which improve it. Secondly, positive and negative affect may or may not be related to a student's actual potential for educational performance and from a third-part objective perspective its influence may thus be over-rated. A student can be negatively motivated and pass an examination and positively motivated yet fail – motivation is one intervening factor in a complex inter-relation of effects, including mastery of subject content, experience and self-reliance.

A self-concept is an evolving factors in the construction of learners educational lives, it is neither finite nor static and may change on a ratio of positive or negative influence depending on the learners values, thoughts and intentions, the hospitability of the learning environment and prevailing organisational culture and circumstances (Sikhwari, 2007, p. 523). Motivation also involves personality and will as is seen as a driving force in closing the gap between current and future states of knowledge involving skill acquisition and qualifications. It is not inherently something that is "done to people rather is something that people do" (Deci, 1996, p. 21). It is also an intrinsic factor in workplace organisation as well in the personal psychological fabric of students' lives.

Sikhwari suggests that it comprises a set of dependent/independent variables in relationships between the learning and the learning activity which account for the persistence and direction of a learner's behaviour if all other factors such as aptitude, skill, understanding, intelligence and environmental constraints are held constant (Sikhwari, 2007, p. 523). Furthermore, any learning-teaching situation may be characterised by what may be termed "autonomous dependence" (Deci, 1996, p. 90). This differs markedly from overly-controlled environments which are characterised by "coerced or controlled dependence" which may be amotivational (Deci, 1996, p. 90). Motivation is also related to attitude as an underlying constant in the formulation of a learning disposition. A more precise definition of attitude is offered as "[m]ental and neural states of readiness, organised through experience, exerting a directive or dynamic influence on a person's response to objects and relations" (Sikhwari, 2007, p. 524). As such attitude is seen as a concept which might be real or imagined and involves a cognitive, evaluative orientation of an individual (Sikhwari, 2007, p. 524). Attitude differs from motivation in so much as the former concerns a general tendency to behave in a particular way towards a task whereas the latter is concerned with providing the reason or driving force towards accomplishing the task (Sikhwari, 2007, p. 524).

Individuals who have relatively high stress and feelings of discomfort at University but a lower sense of control are more likely to experience a lowered sense of well-being and correspondingly may feel limited enjoyment and motivation (Gavala and Flett, 2005, p. 52). In comparison in situations where people report a higher sense of academic control with higher comfort from the environment there is correspondingly higher well-being. People desire to be a causal agent in managing their own learning (Deci, 1996, p. 94). Interestingly Gavala and Flett found no moderating effects of cultural identity on motivation (2005). If people are presented with a comfortable working environment that is culturally congruent to them then there are corresponding increases in psychological well-being and academic enjoyment and motivation (Gavala and Flett, 2005, p. 52). Factors contributing to academic success include a.) maintaining good working relationships (or at least a sound relationship with one other), and b.) having solid family support. Motivation is related to attitude in so far as evaluation of experience as positive or negative may interact with motivation to continue change or discontinue a particular task. Academic achievement, for example, may be its own reward or it may be a means to further reward such as qualification for employment. However, motivation becomes particularly important when equity issues such as socio-economic status, low incomes, low education, produce limited opportunities for development. In such situations where there are few external drivers of motivation and negative stimulants for attitude, intrinsic motivation becomes far more important. Extrinsic rewards, when they are part of educational development, need to be equitable (Deci, 1996, p. 55).

Choice is also relevant for motivation. If an individual chooses to be involved in a particular activity for curiosity or intrinsic reasons they are more likely to value it (Shroff et al., 2008, p. 114). Coping behaviour is also predicated on personal efficacy in relation to task engagement, if personal efficacy in task engagement is seen as higher than people will be more motivated, if it is seen as lower then demotivation may result (Shroff et al., 2008, p. 121). Coupled with intrinsic motivation, extrinsic motivation such as teacher's attitudes or instructional design quality are important but these factors are one pedagogical overlay on stimulating self-regulation among students which may include three factors: "personal functioning by goal setting, self-evaluation in academic performance" and utilising the "learning environment by seeking information and assistance" (Teoh et al., 2009, p. 712).

1.3 Concepts in academic motivation

Curiosity contributes to motivation in so much as it is one driver of persistence in learning and performance (Yoshida et al., 2008, p. 1401). The antithesis of motivation is the situation of 'learned helplessness' which can arise when people are exposed to uncontrollable stresses which condition them to fail to recognise and escape from controllable stresses – causing demotivation and even in some cases, depression (Yoshida et al., 2008, p. 1401). Conversely the motivation for accomplishment of learning tasks can be defined as the psychological propensity for pleasure and satisfaction following successful task completion. Classroom motivation is also related to certain instructor/teacher characteristics such as "fairness, caring, enthusiasm, consistency and impartiality" (Dykstra et al., 2011, p. 2). Motivational values such as a desire to learn, personal incentives (intrinsic and extrinsic) and striving for excellence may be affected from such conditions as: Interest, learning from others, taking responsibility for learning, intrinsic and extrinsic task and social rewards (Yoshida et al., 2008, p. 1402). While completed tasks are seen as more pleasant and incomplete tasks as less pleasant, tasks recall is higher for completed tasks than incomplete tasks. Moreover, instructors who maintained highly structured, organized and outcome-focused lessons are more likely to inspire motivational learning confidence in students (Dykstra et al., 2011, p. 2). For students of lower ability, completion of low-level tasks is more rewarding than attempting to complete higher level tasks which motivate other groups (Yoshida et al., 2008, p. 1410). Tan suggests that student achievement is attributable to both environmental and genetic conditions (2009, p. 156) however it is not possible to improve the learning performance of someone who is not motivated.

As Wilson suggests, motivation explains behaviour and actions (Wilson, 2009, p. 272). It is defined as being "the force which starts and sustains our activities towards achieving our goals" (Wilson, 2009, 272). If a performance orientated student has high motivation without an internal interest then it is more likely for them to adopt approaches to learning that are 'surficial' (Wilson, 2009, pp. 278–279). This emphasises the need in some learning situations for intrinsic goal setting rather than over-reliance on external goal setting (Wilson, 2009, pp. 278–279). Surface learning is thought to be a characteristic of 'performance avoidance students; whereas performance approach students adopt a more strategic approach t learning in which intellectual achievement is valued and obligations are intended to be fulfilled (Wilson, 2009, p. 279).

According to Dornyei and Shekan (2003) motivation describes three factors: 1.) why they do something, 2.) how long they do it for, 3.) how hard to pursue it. However, because people are infinitely complex there is no one definitive path to peoples' motivations. Putting money into consideration in motivational contexts is more complex and is not in itself to be considered an entirely beneficial ingredient in the learning process. As Deci explains, "When people say that money motivates, what they really mean is that money controls. And when it does, people become alienated – they give up some of their authenticity – and they push themselves to do what they think they must do" (1996, p. 29). Consequently monetary motivation is thought to undermine autonomy and volition in some circumstances. At the level of extrinsic reward Adair also points to the shortcomings of money as a motivational tool, "At best money is a crude measure of the value of work. Is a pop star really worth a thousand times more than a brain surgeon?" (2006, p. 113).

Diminution of autonomy may lead to mal-adaptive consequences (Deci, 1996, p. 31). Whilst in everyday life it serves as justification for service and job performance, morally it is not in

itself self-justificatory. In the teaching context, Gardner and Lambert (1972) describe motivation as persistence that is shown by teachers and learners in the learning environment towards achieving a learning goal. A distinction can be made between intrinsic motivation (behaviour for its own sake) and extrinsic motivation (behaviour as a means to some external reward) (Bektas-Cetinkaya and Oruc, 2011, p. 72). Many peoples' motivations may be seen as being on a continuum between self-determined and controlled motivation (Bektas-Cetinkaya and Oruc, 2011, p. 72). However, little attention is often made to the environmental factors of motivation be they physical or social in effect. However, a study by Clemens (2008) revealed that students' socio-economic status has a large effect on academic achievement and that motivationally supportive environments are positively related to academic achievement (Bektas-Cetinkaya and Oruc, 2011, p. 72).

1.4   A summary of different theories of motivation

As Wilson suggests, motivation is the term used to explain why we act in certain behavioural patterns at given times, and is a "force which starts and sustains our activities towards goal achieving" (Wilson, 2009, p. 272). There are four major theories of motivation. Attribution theory suggests that our actions are the result of making sense of our environment, the search for causes to perceptions, feelings and events creates a behavioural dynamic of socially constructed reality (Wilson, 2009, p. 272). In comparison, expectancy value theory suggests that the amount of motivation or effort for a task is dependent on the expectant value of success. The fact that individuals calibrate themselves or set gaols based on interpretations of past achievements is the basis for self-efficacy theory. Fourthly, goal orientations explain how we view success give orientation towards a particular activity (Wilson, 2009, p. 272). The mastery of goal expectation is based on a desire for increased understanding which is more likely to occur in learning environments in which students receive sufficient feedback in response to learned competencies. There is also a distinction between performance approach goals and performance avoidance goals. Performance approach goals refer to orientation toward demonstrating high ability whereas performance avoidance goals orientation towards demonstrating low ability. In the education context overly-controlling behaviour is thought to reduce choice, diminish autonomy and if applied in too rigid an environment lead to reduced motivation. As Deci suggests, "Deadlines, imposed goals, surveillance, and evaluations undermine intrinsic motivation. People experience them as being antagonistic to their autonomy, so these events drain people's sense of enthusiasm and interest in controlled activities." (1996, p. 31). However, if such controls are delivered in such a way to make them appealing, with corresponding intrinsic and extrinsic rewards, people may feel more motivated to accomplish them.

1.5   Motivational attitudes

According to Pintrich there are four types of extrinsic motivational styles which are expressed on a continuum from externally influenced (learning environment controls) to internally influenced (self-controlled). These are: a.) external – regulated by others according to constraints and rewards, b.) introjectors who internalise values but who are still externally controlled, c.) identification – more internal control and self-validation with learning values, d.) integration – high internal control and alignment with learning values (2003, p. 673).

According to Pintrich suspension of perceived control in some learning situations may valuable for students as it necessitates adaption to the learning task (2003, p. 673). If students fail they then are more likely to attribute it to a cause outside their control – thus teachers need to provide intrinsic motivational rewards that do not cause students to negatively

externalise their learning task self-efficacy. As Deci suggests, "to be intrinsically motivated people need to *perceive themselves* as competent and autonomous; they need to feel that they are effective and self-determining." (1996, p. 86). However, in many situations student and learning environment stability rather than control is more important in predicting future outcomes from motivated behaviour although control is reflected in the difference between the learning gap in adaptive (shapeable) or unchanging levels of knowledge acquisition and intelligence (Pintrich, 2003, p. 673). Adair suggests there are eight principles of motivating others (2006, p. 109):

- Be motivated yourself
- Select people who are highly motivated
- Treat each person as an individual
- Set realistic and challenging targets
- Remember that progress motivates
- Create a motivating environment
- Provide fair rewards
- Give recognition

However, even if all other motivational factors are successful and students learn in optimal environments – external influences may undermine student engagement – these include family and employment commitments, personal and personal and cultural factors (Ross, 2010, p. 5). Overall however, whatever the characteristics of the learner, instructor or the environment motivation is the "attainment of a state of being" (Deci, 1996, p. 21).

2   CONCLUSION

Motivation is a central though under-researched factor in teaching and learning and workplace performance. It is a intrinsic characteristic of any learning process but is frequently over-looked in many pedagogical models of teaching practices. Motivation is inherently concerned with a 'desire to learn', it is the cognitive and affective elements that provides the drive to close the gap between one state of knowledge and another more advanced state in any learning practice. Motivation has both intrinsic and extrinsic causations and is often predicated on a mixture of self-determined and environmental conditions. It behoves any teacher both in contact and in distance education to design environments in which students are given the optimum conditions to flourish and realise their learning potential. Because of the combination of self-determined and extrinsic features of any motivational learning environment, motivation requires a form of learner-instructor interaction which is at least interested and self-sustaining and at best a fully engaging humanistic exchange of curriculum knowledge and ultimately within the workplace.

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REGRESSION ANALYSIS OF CUSTOMER LOYALTY IN EDUCATION SERVICE INDUSTRY

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ABSTRACT
Customer loyalty is important for institutions in education service industry since loyal students/graduates, are the best guarantee to ensure sufficient student enrolment in the future. Our main purpose was therefore to investigate what effects customer loyalty in education service industry. We conducted a quantitative research using online survey. The empirical study was done on a sample of graduates of undergraduate and postgraduate studies at Faculty of Commercial and Business Sciences in Slovenia. The analysis of multiple regression offers a very good model as it explains as much as 69,7% of the variance of the concept of customer loyalty in education service industry with only two antecedents of customer loyalty, being customer satisfaction and expectations. This result confirms findings of some other empirical studies that were done in different service industries and shows that customer satisfaction has a great positive impact on customer loyalty. Besides customer satisfaction, expectations that students form about the quality of knowledge and competences that the Faculty would provide after finishing their studies is also significant antecedent of customer loyalty. This determinant is not seen as antecedent of customer loyalty in similar studies of customer loyalty. It therefore opens a whole new area of interest for further research.

Keywords: Customer Loyalty, Customer Satisfaction, Education, Expectations, Regression Analysis

1 INTRODUCTION

Education service industry in Slovenia is becoming highly competitive market with creating new privately owned educational institutions as well as expanding some educational programs on public universities and secondary schools. Since changes are most visible in higher education, we are particularly interested in this segment.

In recent years tertiary education in Slovenia is expanding. Many colleges establish their own programs at higher levels (eg Masters, PhD), so it is very important that their students are loyal to them. Customer loyalty is important to create a strong and reliable base of customers (Gee et al., 2008, p. 364) and education service industry is no exception.

We observe that in education service industry loyal customers, namely students/graduates, are the best guarantee to ensure sufficient student enrolment in the future. Loyal students continue their studies at higher levels in selected institution if they offer ones. Loyal students also speak highly positively about the education institution. Loyal students recommend their selected education institution to their colleagues, friends, and relatives. We can say that loyalty is the best policy for institutions in education service industry.

Our main purpose is therefore to investigate what effects customer loyalty. If educational institutions wish to ensure high customer loyalty of their students, it is important for them to understand, how to achieve customer loyalty. These were our guidelines in setting our research question: **»What does customer loyalty in education service industry depend**

on?« Based on this research question we set the goal to research which determinants affect customer loyalty in education service industry in Slovenia and how.

We carried out quantitative research through online surveys. The research was implemented in May 2012. The sample included graduates of the Faculty of Commercial and Business Sciences who have completed studies at undergraduate or postgraduate level. Sample consists of 92 graduates. Response rate was 35.8%. The analysis was made using the statistical software package SPSS 19.

2   THEORETICAL BACKGROUND

Sirdeshmukh and Singh (2000, p. 150) identified customer loyalty as a marketing currency of the 21st century. Marketers wish to build relationships with their customers, but they are aware of the difficulties of doing it. Customer loyalty is seen as a deep commitment of customer to certain product that he or she buys and intends to prefer it in the future, regardless of the marketing efforts of the competitors (Oliver, 1999, p. 34; Oliver, 1997, p. 392). Customer loyalty is a long-term attitude and a long-term pattern of behaviour, that is stimulated by a variety of experiences, acquired by the customer over time (Terblanche and Boshoff, 2006; Gee et al., 2008, p. 360). Customer loyalty is seen as a repeated purchase or a repeated relative size of purchase of the same brand (Tellis, 1988; Oliver, 1999, p. 34).

Uncles et al. (2003, p. 294) conclude according to their literature review on popular conceptualizations of customer loyalty there is no universally agreed definition (Jacoby and Chestnut, 1978; Dick and Basu, 1994; Oliver, 1999; Uncles et al., 2003). Instead, there are three popular conceptualizations (Uncles et al., 2003, 294):
1. Customer loyalty as primarily an attitude that sometimes leads to a relationship with the brand;
2. Customer loyalty mainly expressed in terms of revealed behaviour (i.e. the pattern of past purchases); and
3. Customer loyalty as buying concept moderated by the individual's characteristics, circumstances, and/or the purchase situation.

Despite the diversity of definitions of customer loyalty, two major approaches have been developed over time: behavioural and emotional. Initially, researchers have focused on the behavioural approach. In this approach, loyal customers are seen as those who buy and re-buy the same brand, appreciate that exact brand and are not looking for information on competitive brands. Such loyalty is measured in academic researches through the frequency of re-purchase the same brand or through relative share of this brand in the total consumption of the customer. Later, academics defined customer loyalty from the emotional point of view, which shows customer's attitudes to the certain product. It refers to the company's commitment, willingness to recommend the company, demonstrates positive emotions and feelings to the company or its products.

Different researchers define customer loyalty and further operationalize customer loyalty differently. Operationalizations may include: "Customer speaks positively about the company"(Boulding et al., 1993, p. 14); "Customer recommends company to others" (Parasuraman et al., 1988) or "Customer remains loyal to the company" (LaBarbera and Mazursky, 1983, p. 394; Rust and Zahorik, 1993, p. 199).

According to these findings we have operationalized customer loyalty with three manifest variables:
- "I speak only positively about my Faculty."
- "I will recommend my Faculty to friends and colleagues."
- "If I were to start my studies, I would have chosen my Faculty again."

Both aspects of loyalty, emotional and behavioural, were included in the measurement, because this is consistent with measuring customer loyalty in current academic researches. And also in order to get a latent variable, customer loyalty, that best presents the loyalty of our students. The first two variables refer to the measurement of the emotional aspect of customer loyalty, while the third variable measures loyalty from the behavioural point of view.

Empirical researches show that antecedent which most strongly affects customer loyalty is customer satisfaction. Oliver (1997, p. 13) defines customer satisfaction as an emotional and cognitive evaluation of experience with the product. Customer satisfaction is the estimation whether the characteristics of a product or a service have reached a level of performance that gives a pleasant feeling. Oliver's definition of customer satisfaction is based on the paradigm of unconfirmed expectations (1980, pp. 460−462; 1997, pp. 98−126) and derives from the belief that customers have developed the expectations about the product. Customer satisfaction is a dynamic process that occurs on the basis of confirmation of expectations and gradually develops into customer loyalty. Martin O'Neill et al. (2008, p. 232) emphasize that it is necessary to measure customer satisfaction as cognitive and emotional aspects in order to better understand how customers form their customer satisfaction.

Fornell et al. (1996, p. 10) operationalize customer satisfaction with three manifest variables: customer satisfaction as a whole, as an estimation how expectations were fulfilled, and as comparison with the ideal service or product. This choice they explain as consistent with the orientation of American consumer satisfaction index (ACSI). We find this operationalization of customer satisfaction also in empirical studies by Johnson et al. (2001, p. 235) in the proposed new model of customer satisfaction, based on the American consumer satisfaction index (ACSI), further empirical studies by Türkyilmaz and Özkan (2007, p. 677) in the index of customer satisfaction with Turkish mobile services and in studies by Kristensen et al. (2000, p. 1009) in the European customer satisfaction index (ECSI).

According to these findings we have operationalized customer satisfaction with three manifest variables:
- "My expectations about the studies at the Faculty are totally met."
- "Studies at the Faculty are consistent with my idea of ideal Faculty."
- "Studies at the Faculty are better than studies at other Faculties."

Expectations are likely to be beneficial to establish a positive or negative attitude towards the phenomenon (Olson and Dover, 1979; Oliver, 1981, p. 33). We believe that expectations that students form about the quality of knowledge and competences that the Faculty would provide after finishing their studies are important antecedent of customer loyalty. Rego (1998, p. 132) believes that customer satisfaction reflects a delivery of expectations, which have been obtained as the product was experienced. It seems almost self-evident that expectations affect customer satisfaction inversely; lower than expectations, higher customer satisfaction is, or higher than expectations, harder to meet customer satisfaction is, therefore customer

satisfaction is lower. Regardless of several researches that confirmed positive affect of expectation to customer satisfaction, there are rare empirical studies that investigate the link between expectation and customer loyalty. According to our literature review this link is indeed neglected. This opened question in literature forms a challenge for our research.

3 RESEARCH

3.1 Gathering the data and the sample

In May 2012 we have sent an e-mail with online survey addressed to every student of the Faculty of Commercial and Business Sciences who have graduated in the period from 1st October 2011 to 1st May 2012. The survey was sent to 257 graduates, 207 of them are graduates of undergraduate study and 50 graduates of master's titles. We have received 92 answered surveys. Response rate was 35.8%. Our sample consists of 62 bachelor's graduates, which means that their response rate was 30% and 30 masters' graduates, which means that their response rate was 60%.

The sample consists of 69.6% women and 30.4% men. 35.9% of all respondents are over 41 years old, 32.6% are between 31 and 40 years old, 23.9% are between 26 and 30 years and 7.6% are between 21 and 25 years old. Most students (40.2%) were attending studies in Celje, further Ljubljana (29.3%), Maribor (14.1%), Murska Sobota (8.7%), Nova Gorica (5.4%) and Kranj (2.2%). Majority of students in the sample, 94.6%, are attending part-time studies, and the remaining 5.4% are full-time students. 67.4% of the students in the sample are undergraduate students and 32.6% are graduate students. Majority of students (84.4%) are employed, 12.0% of them are unemployed, 2.2% of them still own a student status and 1.1% is working on contract.

3.2 Regression analysis

According to literature customer satisfaction affects customer loyalty. Expectations are also important determinant in archiving customer satisfaction according to some empirical studies, but researching the connection between expectations and customer loyalty is seldom neglected in academic studies. We believe that expectations about the quality that Faculty provides impact customer loyalty. Therefore we have formed a model that predicts positive impact of customer satisfaction and expectations to customer loyalty. As the output variable, the key latent variable in the model, we set customer loyalty. The model includes the concept of customer satisfaction and expectations. Multivariate analysis of multiple regressions was used to analyze the data. The program we used was SPSS.19.

In researching for the best model that explains what effect customer loyalty, we used stepwise method in multiple regressions analysis as we wanted to include antecedents of customer loyalty that are otherwise rarely confirmed in empirical studies, but might have been important antecedents of customer loyalty in the case of education service industry. Analysis eliminated insignificant antecedents and explored two models that are both significant. We will hereafter devote more attention to the second model, because it confirms our belief that not only customer satisfaction, but also expectations are important determinant in achieving customer loyalty.

Table 1: Results of multiple regressions for customer loyalty (Customer loyalty of graduates at FKPV, survey, 2012)

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
						Change Statistics			
1	,824[a]	,679	,675	,40903	,679	173,297	1	82	,000
2	,839[b]	,704	,697	,39480	,026	7,017	1	81	,010

a. Predictors: (Constant), customer satisfaction

b. Predictors: (Constant), customer satisfaction, expectations

c. Dependent Variable: customer loyalty

Coefficients[a]

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	1,088	,228		4,776	,000
customer satisfaction	,803	,061	,824	13,164	,000
2 (Constant)	,581	,291		1,995	,049
customer satisfaction	,767	,060	,787	12,687	,000
expectations	,152	,057	,164	2,649	,010

a. Dependent Variable: customer loyalty

The value of F-test regression model for the concept of customer loyalty is statistically significant (Sig. = 0.000). The model explains 69.7% of the variance of the concept of customer loyalty and can be written using the following regression equation:

Customer loyalty = 0.545 + 0.774 × customer satisfaction + 0.157 × expectations

The key variable in the prediction of customer loyalty is customer satisfaction.

4   CONCLUSION

The analysis of multiple regression offers a very good model as it explains as much as 69,7% of the variance of the concept of customer loyalty in education service industry with only two antecedents of customer loyalty, being customer satisfaction and expectations.

By far the most important, the key variable in the prediction of customer loyalty is customer satisfaction. This result confirms findings of some other worldwide studies that were done in different service industries and shows that customer satisfaction has a great positive impact on customer loyalty. These conclusions are important contribution to education service industry in particular for Faculties. It is important that students are satisfied with the service that the Faculty provides as customer satisfaction of graduates is by far the most important antecedent of customer loyalty. Besides customer satisfaction, expectations that students form about the

quality of knowledge and competences that the Faculty would provide after finishing the studies is also significant antecedent of customer loyalty.

Several academic studies confirm that measuring customer satisfaction is important as customer satisfaction is the key in achieving customer loyalty. Our empirical study confirms these findings. Faculties wishing to achieve loyalty of its graduates will have to focus their attention on achieving satisfaction of their students. Regular monitoring of customer satisfaction and adopting measures which leads to achieving higher customer satisfaction of students is right way for Faculties that want to compete in this highly competitive market. Besides customer satisfaction, expectations are also an important antecedent of customer loyalty of graduates. These findings are important contribution to Management of Faculties. Management is therefore obliged to ensure that students enrolling the Faculty get a picture that is as real as possible about the knowledge and competences the Faculty provides to their students. In this case their expectations can be realized and fulfilled expectations would help to build loyal students.

We see the limitation of our study is our choice to implement empirical research on the population of graduates from one selected Faculty. Therefore we suggest implementing such a research on broader population of graduates from other Faculties, with this we have in mind public ones and privately owned.

The survey left number of other open questions for the future. The question that rises in the context of ownership of the Faculties is also whether graduates from public and privately own Faculties have different expectations about the quality of knowledge and competences they would receive and further, does ownership plays a moderating role in this regression model.

It would be interesting to investigate the impact culture has on customer loyalty and its antecedents. This can be implemented only by empirical study with the data being collected in other cultures. Therefore we urge researchers from other countries to verify our model among their graduates.

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STRATEGIES FOR THE DEVELOPMENT OF GREEN LOGISTICS IN TAIWAN

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ABSTRACT
Logistics companies have been dealing with an increasing amount of material flows caused by economic growth in recent years. Energy consumption, air and waste pollution, and resource wastefulness have become serious problems. Therefore, the concept of green logistics, in the context of sustainable development, has emerged.This paper conducted a literature review to summarize the implications of green logistics and the current status of green logistics development in Taiwan and overseas. It also interviewed academics and experts from government agencies, research institutes and industries; in order to identity the strengths, weaknesses, opportunities and threats of green logistics development in Taiwan. Finally, this study produced a TOWS matrix for the strategy mapping and formulation of green logistics strategies in Taiwan.

Keywords: Expert interviews, Green logistics, SWOT analysis, TOWS matrix

1 INTRODUCTION

Logistics activities and social/economic development are the two sides of the same coin. On one hand, logistics is the pillar that supports economic development. On the other hand, economic development increases the total volume of logistics flows. Over the past decades, the vibrant development of regional blocs, such as the North American Free Trade Agreement, the European Union and the World Trade Organization, have led to the development of global logistics. Meanwhile, zero-inventory and just-in-time distribution strategies have also emerged in response to lifestyle changes. All these factors contribute to the growing frequency of logistics activities. However, logistics activities cause air and waste pollution, resource wastefulness, and traffic jams. As the global economy continues to expand, the impact of logistics activities on the environment also increases.

The international community has also come up with measures to curb the pace of global warming. The United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Copenhagen Accord all require participating countries to individually or collectively control the amount of greenhouse gas emissions, in order to reduce the impact of greenhouse effects on the global environment. As wastefulness in fuel consumption and packaging materials in the logistics process generate a huge amount of carbon emissions, the low-carbon requirements in the international community have confirmed the necessity of green logistics.

Green logistics have been in operation in some developed countries for years, and this has become part of the international trend. The European Union, the US and Japan have all enacted relevant regulations so as to promote the development of green logistics. Taiwan has been playing catch-up. In 2004, the Ministry of Transportation and Communications published a whitepaper for transportation policies and set out a vision of efficiency, intelligence, liberalization and sustainability for the development of cargo transportation. However, green logistics is still new to Taiwan and there have been few relevant studies. As a result, most people and enterprises are not clear about the concept of green logistics and hold a wait-and-see attitude when government agencies and companies seek its promotion.

Therefore, this paper conducted a literature review to summarize the implications of green logistics and the current status of green logistics development in Taiwan and overseas. The purposes of this paper were as follows: (1) a literature review to gain an understanding of the implications of green logistics and the current status of green logistics development in Taiwan and overseas; (2) interviews with experts to identify the strengths, weaknesses, opportunities and threats for Taiwan to develop green logistics; (3) the production of a TOWS matrix for the mapping of SO, WO, ST and WT strategies. The aim of the above was to formulate strategies for the development of green logistics in Taiwan and serve as a reference for the promotion of green logistics in both the public and private sectors.

2   LITERATURE REVIEW

Green logistics is a new logistics concept that was proposed by corporations and academics in the West in 1990. Logistics activities and social/economic development have been, in fact, two sides of the same coin over the past few decades. The booming of regional blocs has been a driving force for highly efficient global logistics. Meanwhile, lifestyle changes (e.g. the popularity of convenience stores and shopping malls, and the emergence of e-commerce) have been increasing the frequency of logistics activities. These factors have been contributing to the growing problems associated with energy consumption, air and waste pollution, and resources wastefulness. This is why the concept of green logistics that focuses on sustainable development has come into play.

2.1   Definitions of Green Logistics

Scholars in Taiwan and overseas have come up with various definitions of green logistics. Sbihi and Eglese (2007, pp. 99–116) suggested that green logistics is the production and distribution of products in a sustainable way. They argued that environmental and social factors are also part of the equation. Petersen and Petersen (2007) from Demark in their book *Green Logistics* pointed out the implications of green logistics in a brief and concise manner. Green logistics is the ecological management of both forward logistics and reverse logistics. Rodrigue et al. (2001) suggested that green logistics is a logistics system that coordinates with the environment. It is an environmentally friendly and effective logistics system. The

American Reverse Logistics Executive Council (RLEC) in its research publications provides a definition of green logistics, also known as eco-logistics, as a process of delving into how logistics impacts the ecosystem. RLEC also compares green logistics and reverse logistics. It indicates that reserve logistics is the process of products and packaging materials moving from consumers to manufacturers. It aims to re-acquire product values or properly dispose of products. Therefore, reverse logistics is an element of green logistics. Wu and Dunn (1995, pp. 20–38) suggested that green logistics is a combination of the greening of forward logistics, i.e. material acquisition, production, packaging, transportation, storage, and final delivery to end-users, and the reverse logistics that includes waste recovery and disposal.

To sum up the previous definitions of green logistics by scholars, this paper suggests that green logistics is the adoption of measures to reduce environmental impacts in all the elements of conventional logistics, including the material flow throughout its procurement, production logistics within factories, sales, marketing and distribution of merchandise, and the reverse logistics of wasted final products. The measures to mitigate environmental impacts can be the application of advanced technologies or changes in transportation models. Therefore, green logistics, defined by this paper, encompasses green design, green procurement, green production, green packaging, green warehousing, green distribution, and reverse logistics. Below is a list of the relevant explanations.

2.2   Current Status of Green Logistics Development in Different Countries

Major developed countries have been promoting green logistics as the focus of the industry by encouraging the application and development of green logistics technologies and environmentally friendly new materials. These efforts cover the theories and practices concerning recycled materials and are accompanied with relevant green logistics policies and regulations. The purpose is to ensure green material flows and sustainable development. This section summarizes the current status of green logistics development in the US, the European Union and Japan.

2.2.1   United States

The US is the origin of the concept of logistics and has been a world leader in logistics research, design and technology development. In the US, the government promotes a free economy. Economic development increases the frequency of logistics activities. To reduce the environmental impact of logistics activities, the US has to pay increasing attention to green logistics. In a strategic blueprint for national transportation technologies, the US government set out its targets to be achieved by 2025 in its transportation industry structure and technology. These targets are the establishment of safe, highly efficient, sufficient and reliable transportation. It is international in scope, comprehensive in format, intelligent in features and environmental friendly in nature. In terms of corporate activities, many advanced technologies have been developed for the transportation, distribution and packaging of materials. These technologies include electronic data interchanges (EDI), distribution planning, and green packaging. All these efforts provide a strong technical support and guarantee for green logistics activities.

2.2.2   European Union

The European Union began in the 1980s to explore a new collaborative model for logistics systems, i.e. the integration of logistics and supply chain management. The aim was to combine the material flows and information flows between the end consumers and the initial suppliers. It emphasizes the inter-company cooperation in the distribution process of products

by changing the distributed logistics management across companies. The purpose is to achieve logistics efficiency that was previously impossible to reach and reduce the impact of inefficient logistics on the environment. In 2002, Europe came up with an overall transportation project that used a monitoring system to control ships, in order to avoid and eliminate marine pollution caused by transportation. Meanwhile, Freight Forward Europe (FFE) has developed a set of environmental standards corresponding to transportation, loading/unloading and management. It also encourages corporations to apply the new concept of green logistics in their logistics activities and step up their R&D and application of green logistics techniques.

2.2.3   Japan

Since the introduction of total logistics management from the US in 1956, Japan has spared no effort in building the infrastructure of modern logistics. In fact, reforms in the logistics/shipping industry have become a priority in the development of its economy. To reduce the environmental impact of the logistics/shipping industry and to improve the efficiency of logistics, the Japanese government has enacted a series of regulations and requirements. In 1989, Japan proposed three targets for green logistics, to be achieved within ten years. These three targets were a reduction by 30~60% of nitrogen compounds, a reduction by over 60% of granule exhaust particles and a reduction by 10% of the sulphur content in petroleum. To curb greenhouse effects and air pollutions and to reduce pollutions/emissions, the Japanese government and the logistics industry have been promoting a change in transportation models (from vehicles to railways and marine transportation, as the environmental impact is lower), and the infrastructure of a joint railway system. In the cities, it is encouraged to establish joint distribution systems and conserve the energy required for transportation. In 2001, Japan published the Outlines for Logistics Implementation Strategy for Japanese Logistics. One of the highlight measures is to reduce air emissions/pollution, promote environmental protection, and recycle/reuse usable resources. The vision is to establish a positive cycle of resources, ecosystems, society and economy by building up new logistics systems in compliance with environmental requirements. In 2005, a law governing the integration and efficiency of logistics was proposed, with an aim to establish a logistics centre-point by integrating the current inefficient logistics systems (e.g. traditional warehouses, distribution/processed plants and trunk stations), in the hope of facilitating advanced logistics that are efficient and have smaller environmental impacts.

2.3   Basic Concepts of SWOT and TOWS

The TOWS Matrix is a strategy formulation method that falls under the SWOT framework. It is the most frequently used analytical tool in strategic planning in Taiwan and overseas. This paper applied the TOWS Matrix to develop a strategy for green logistics in Taiwan. Below is an introduction of the basic concepts of SWOT and TOWS.

2.3.1   SWOT Analysis

SWOT is an analytical framework used to organize, discern, collate, control, analyze and synthesize relevant data. Many organizations use SWOT analysis as the first step in strategic planning. SWOT, developed by Fred (1986), is a generic strategic management model that consists of the three steps of strategy generation, implementation and evaluation. In the strategy generation process, strengths and weaknesses, as well as opportunities and threats, are identified from the perspectives of the organization (internal) and the environment (external). The purpose is to develop appropriate targets and strategies. A systematic approach in analysis can ensure definite strategies and robust analyses.

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2.3.2 TOWS Analysis

SWOT analysis is no more than an analytical framework and it does not shed light on strategic development. Many scholars and experts have sought to identify a strategic-planning methodology that combines endogenous and exogenous variables. Weihrich (1982, pp. 54–66) proposed the TOWS matrix, which proved to be superior to other analytical tools of the same time. However, the TOWS matrix is a strategy development method that falls under the SWOT analysis framework.

The TOWS matrix presents strengths and weaknesses (within a company) and opportunities and threats (of the external environment) in a matrix. A total of four strategic patterns (2*2) are established using strategic mapping. Below is a summary of the individual strategic implications.

The combination of strengths and opportunities (SO strategy), i.e. Maxi-Maxi, if an opportunity in the external environment and the organization happens to have an advantage, this strategy focuses on the utilization of strengths to capture the opportunity. It actively aligns the external environment and internal conditions to form a niche, so as to maximize the effects of the combination of strengths and opportunities.

The use of strengths to avoid threats (ST strategy), i.e. Maxi-Mini. This approach aims to minimize the impact of external threats by leveraging internal strengths.

The overcome of weaknesses to grasp opportunities (WO strategy), i.e. Mini-Maxi. Although the external environment is in favor of the organization, the internal weaknesses may lead missing the opportunity. It is necessary to improve the weaknesses and leverage external opportunities so as to maximize the benefits to the organization. The improvement of weaknesses to avoid threats (WT strategy), i.e. Mini-Mini. In this situation there are external threats and the organization is disadvantaged. This strategy emphasizes the improvement of weaknesses to avoid threats, so as to minimize the impact of external threats.

3 RESEARCH METHOD

This study collected data, reviewed the literature and conducted interviews with experts. As green logistics is a relatively new topic in Taiwan, there is a limited amount of literature. Hence, the major source of information was gathered via interviews with academics and professionals in industries, government agencies and research institutions. Secondary information was mainly sourced from relevant journals and papers in Taiwan and overseas (e.g. green logistics, strategic planning and SWOT analysis), books and proposals (e.g. project plans by the Department of Commerce, the Ministry of Economic Affairs and the Institute of Transportation of the Ministry of Transportation and Communications), corporate social responsibility reports, and the Internet.

This study focused on the strategic development of green logistics in Taiwan. It was an explorative and qualitative study. Semi-structured interviews were conducted, in order to obtain in-depth and comprehensive data. Table 1 is the list of prepared questions that aimed to facilitate the face-to-face interviews. The interviewees expressed their opinions on the surveyed questions and reflected other opinions whenever necessary. The interview agenda was modified according to the situation and feedback from the interviewees, in order to make up any insufficiencies in the practical elements in the study.

Table 1: Interview Agenda

Questions to the Experts
1.   Do you think it is necessary for Taiwan to develop green logistics?
2.   What do you think are the near-term, mid-term and long-term challenges for Taiwan in developing green logistics?
3.   What do you think are the strengths and weaknesses of Taiwan in the development of green logistics (legal, policy, technology or economic aspects)?
4.   What do you think are the opportunities for Taiwan in the development of green logistics?
5.   What do you think are the threats for Taiwan in the development of green logistics? What can be done about it?
6.   What do you think are the policies and corresponding measures, in terms of legal regulations and economic incentives, for green logistics to be successful? What do you think are the government agencies that should be involved in joint collaborations?
7.   What are the problems or difficulties you encounter in the implementation of green logistics in your organization?
8.   Are there any other suggestions or issues we have not covered?

4 CURRENT STATUS OF GREEN LOSGISTICS IMPLEMENTATION IN TAIWAN

Green logistics is still relatively new to Taiwan, and few large corporations have been promoting green logistics in compliance with international environmental regulations and conventions or as part of their corporate social responsibility initiatives for the environment. This study aimed to analyze the motivations of the electronics and electric machinery industry and marine shipping industry in Taiwan to implement green logistics and summarize their approaches and measures.

4.1 Electronics and Electric Machinery Industry

Most of the companies in the electronics and electric machinery industry in Taiwan operate as OEMs (original equipment manufacturers) or ODMs (original design manufacturers). Given the limited demand from the domestic market, the majority of the industry's output goes to large markets such as the US and the EU. In recent years, in response to the rising environmental concern and in order to reduce the pollution caused by electronics and electric machinery products, the European Union has come up with a series of environmental directives, e.g. Waste Electrical and Electronic Equipment (WEEE), enacted in August 2005, Restriction of the use of Certain Hazardous Substance (RoHs) in electrical and electronic equipment, enacted in July 2006, and Eco-Design Requirements for Using Products, published in 2005. These three EU directives extend the producer's responsibility and require manufacturers to ensure pollution-free manufacturing processes, from materials acquisition, manufacturing, transportation, and delivery to consumers to the recycling/disposal of waste products. Manufacturers now have the responsibility to follow their own products throughout the products' lifecycle.

Taiwanese electronics and electric machinery industries have developed green logistics mainly to comply with the environmental laws and regulations of the countries where Taiwanese products are imported, in order to avoid non-tariff trade barriers. Global warming and resource depletion have also made companies aware of the importance of environmental protection, causing them to initiate green policies, fulfill their corporate social responsibility and seek to achieve sustainable development.

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4.2 Logistics Industry

Currently, more than 90% of imported/exported cargoes are transported via marine routes. The marine transportation industry can be compared to the artillery of the global economy. The heavy use of marine transportation generates 3~4% of global carbon emissions. Since marine transportation is highly international, it is regulated by a set of international norms and standards to ensure the safety of international marine transportation and safeguard the operations of international marine operators. To reduce the environmental impact of marine transportation, the International Maritime Organization (IMO) has published a series of international covenants for the member organizations to abide by. Currently, Taiwan is not an IMO member; however, its ships are still governed by IMO regulations when stopping at harbors, because marine transportation is international in nature. Therefore, the marine transportation industry in Taiwan has been forced to follow the green logistics measures required by the international covenants of the IMO.

Meanwhile, marine operators have assumed their corporate social responsibility by following in the footsteps of the multinationals to combat global warming. They are seeking more than their own financial benefits. In fact, they are trying to avoid environmental damage and the wasting of resources with a variety of green policies. This aims to achieve sustainable development and play their roles of corporate citizens.

5 STRATEGIES FOR GREEN LOGISTICS DEVELOPMENT IN TAIWAN

Based on the interview results, this paper generalized the goals for green logistics in Taiwan. The next step was to use the SWOT framework to analyze the strengths and weaknesses (within Taiwan) and opportunities and threats (outside of Taiwan), in the context of these goals. A TOWS matrix was developed and mappings of the SO, ST, WO and WT strategies were presented in the formulation of competitive strategies for green logistics in Taiwan.

5.1 Necessity for Taiwan to Develop Green Logistics

Climate change and environmental destruction have become the top priorities of the global agenda. The rising awareness about environmental protection has made green issues a global concern. The interviewees all agreed that it is necessary for Taiwan to develop green logistics, as it is an international trend and an urgent necessity. Table 2 summarizes the opinions of the interviewees.

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Table 2: Feedback from Interviewees Regarding the Development of Green Logistics in Taiwan

	Do you think it is necessary for Taiwan to develop green logistics?
Industries	It is a must-do for Taiwan to connect with the international community.
	The development of green logistics is essential; otherwise, we may be faced with trade barriers.
Government	The development of green logistics is a good thing for Taiwan. Taipei Harbor will surely become a green and low-carbon harbor in the future.
	It is absolutely critical, as the two guidelines for the Ministry of Transportation and Communications are the re-establishment of the international gateway over the air and the seas and the improvement of national competitiveness and the promotion of sustainable and green transportation and tourism, and the encouragement of energy efficiency and carbon reduction.
Academics	It is necessary from the perspective of legal requirements and economic benefits. Green logistics are part of the international agenda and the EU directives. Meanwhile, the development of green logistics can save costs.
	It is necessary, in the context of environmental changes, energy shortages and global warming. We are all part of this global village. Individuals, companies and governments should all make contributions to the environment. In the logistics development, it is important to consider environmental impacts. Environmental friendliness is critical, in terms of carbon emissions and waste disposal.
Research Institutes	The necessity of green logistics can be elaborated in terms of the demand from the government, industries and consumers. The government wishes to connect with the international community. Industries want to cater to customers' needs. Consumers are increasingly environmentally aware. Hence, from the perspectives of the government, industries and consumers, it is necessary to develop green logistics.
	It is indeed necessary. All the other countries are doing it. Also, an ignorance of carbon taxes will increase the company costs incurred in the future.

5.2 SWOT Analysis on the Development of Green Logistics in Taiwan

This study reviewed relevant literature and interviews with experts from the academics, industries, research institutes and government agencies, and analyzed the internal and external conditions for Taiwan to develop green logistics. Table 3 summarizes the SWOT analysis on the development of green logistics in Taiwan.

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Table 3: SWOT Analysis on the Development of Green Logistics in Taiwan

Strengths	Weakness
S1:Government's concern aboutsustainable development and green logistics S2: Completeness of industry clusters S3: Development of IT technologies S4: Growth of IT industry S5: Rising awareness among the public	W1:Insufficient awareness amongcorporations and the public in green logistics W2: A lack of policy guidance W3: A lack of a uniform contact window in the authorities W4: A lack of technologies and facilities to develop green logistics among SMEs W5: A lack of professionals in green logistics W6: A lack of local experience in Taiwan
Opportunities	**Threats**
O1: Green trade barriers for international trades O2: Requirements from international brands and leading manufacturers (driver) O3: Emergence of fourth party logistics O4: The signing of the Economic Cooperation Framework Agreement between China and Taiwan O5: Social benefits and economic benefits brought about by green logistics	T1: Numerous international regulations governing green logistics T2: High upfront investments T3: Industry chain yet to be integrated

5.3 Strategy Development for Green Logistics in Taiwan

In this section the factors developed in the SWOT framework were mapped into a TOWS matrix. There were five factors about strengths, six about weaknesses, five about opportunities and three about threats. Strategies were developed by placing the internal strengths and weaknesses in the context of external opportunities and threats. The mapped strategies, symbolized as SO, WO, ST and WT, are the benchmark for the strategic development of green logistics in Taiwan. The results are summarized in Table 4.

Table 4: TOWS Matrix for the Development of Green Logistics in Taiwan

Internal / External	Strengths	Weakness
Opportunities	SO1: Signing of FTAs to increase the total volume of cargoes and achieve the economies of scale; an incentive to encourage green logistics SO2: Promotional campaigns targeted at manufacturers to increase awareness in the necessity of green logistics SO3: Green logistics as part of an eco-labeling system to encourage the purchase of green logistics products/services SO4: Promotion of fourth party logistics	WO1: Establishment of a committee across multiple ministries WO2: Formulation of relevant regulations WO3: Utilization of fourth party logistics by SMEs WO4: Establishment of demo cases as a reference to industries WO5: Enhancement of professional education to nurture talents in green logistics
Threats	ST1: Offering technical support, incentives and subsidies to manufacturers implementing green logistics ST2: Enhancement of green logistics capabilities among corporations and the reduction of resource wastefulness and environmental impacts ST3: Adoption of an integrated transportation model to mitigate environmental impacts	WT1: Following up on the international regulations governing green logistics and understanding their similarities/differences WT2: Promotion of green logistics in stages to achieve the integration of industry chains

6 CONCLUSIONS AND SUGESTIONS

The strategies for the development of green logistics generated with a TOWS matrix were divided into the three aspects of government, corporations and society.

6.1 Government

The government should drive the development of green logistics in stages. Joint efforts are required from the Ministry of Economic Affairs, the Ministry of Finance, the Ministry of Transportation & Communications and the Environmental Protection Administration. The top priority is the establishment of a cross-ministry committee to centralize the planning of green logistics development. This committee should be the focal point of initiatives and the planning of relevant regulations.

In the initial stage of green logistics implementation, the government should serve as a guide by organizing seminars and workshops for manufacturers, so that they are aware of the concept of green logistics. The government has to articulate the implications, scope and technological aspects of green logistics and ensure that manufacturers understand the current status of green logistics in other countries, as well as relevant international regulations governing green logistics. Meanwhile, incentives, subsidies and technical support should be provided in order to encourage participation and attract more companies to the bandwagon of green logistics.

As far as mid-term plans are concerned, the government should select an industry to run a pilot program in green logistics. This will allow the establishment of demo cases, so that other manufacturers can become aware of the benefits of green logistics and duplicate the success

of the demo cases in the implementation of green logistics. Meanwhile, the government can incorporate green logistics into the eco-labeling system. This can encourage the awareness among consumers in the choice of environmental friendly products and prompt companies to develop green products to meet with the market demand.

To attract more manufacturers to the initiatives of green logistics, the government is offering various subsidies and incentives. It should also enter into FTAs. For companies, business opportunities are a prerequisite for logistics. Only with a large economic scale of cargo shipments is it possible to reduce the costs associated with green logistics.

Finally, at the end of the pilot program, the number of participating companies will have grown and the majority of businesses will be willing to operate green logistics. At this juncture, it will be possible to integrate the supply chain and maximize the effects of green logistics through legal enforcement.

6.2   Corporations
For small-and-medium enterprises without sufficient equipment and technology, fourth party logistics operators can be outsourced and an integrated transportation model can be established during the initial stage of green logistics implementation, in order to provide the reduction of environmental impact with the simplest method. The next step is the introduction of advanced logistics technologies, green procurement and sales, packaging reductions and standardization, and reverse logistics. All these initiatives can gradually build the capability of green logistics.

6.3   Society
The government, companies and schools should work hand-in-hand to fill in the talent gap in the development of green logistics. Green logistics involves multiple disciplines, such as sustainable development theories, ecological economics, ecological ethics, and logistics cost/performance. In addition to a multi-disciplinary approach and an emphasis on fundamental theories, it is necessary for companies to provide hands-on opportunities to marry theory with practice, so as to develop green logistics talents equipped with professional expertise and practical experience.

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THE IMPACT OF TRADE COMPETITION ON MANAGERIAL INCENTIVES AND PRODUCTIVITY

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ABSTRACT
We study a model of monopolistic competition with firm heterogeneity –in terms of productivity- in which firms provide incentives to managers to reduce marginal cost. In our model managerial incentives are endogenously determined by firm's productivity and the intensity of competition. We show how tougher competition, generated by large market size or trade, induces stronger incentives to reduce marginal cost for the more-productive firms while the opposite holds for the less-productive firms; this further affects the selection of heterogeneous producers into the domestic and foreign markets. Aggregate productivity growth is decomposed in two sources, within-firm growth and between-firm growth, a decomposition that has not been theoretically analyzed before. We provide a useful theoretical model to analyze how exposure to competition leads to firm productivity growth and how this further affects aggregate performance measures and selection.

Keywords: Competition, Heterogeneous Firms, Managerial Incentives, Productivity, Trade

1 INTRODUCTION

Over the last decade, a number of studies have examined the relationship between trade openness and productivity finding major improvements in firm productivity as a result of trade liberalization (Amiti and Konings, 2007; Trefler, 2004; Pavcnik, 2002). However, there is a lack of theoretical and empirical literature on the precise mechanisms underlying this relationship. In this paper I will highlight a particular mechanism through which trade openness might affect productivity: managerial incentives.

The empirical literature on trade and productivity has revealed two facts: first, that increased exposure to trade leads to firm and industry productivity gains (Pavcnik, 2002; Schott et al., 2006; De Loecker, 2007) and second, that exporting firms are more productive than non-exporting firms (Bernard and Jensen, 1999; Clerides et al., 1998). These well documented empirical facts motivated the creation of trade models that incorporated firm heterogeneity to explain industry's productivity growth as those of Melitz (2003) and Bernard, Eaton, Jensen and Kortum (2003). These models indicate that trade liberalization leads to industry productivity gains due to market share reallocation from the less productive to the most productive firms, what I call the "between-firms" effect. However, they assume firm productivity as given throughout the opening up to trade process, disregarding the possible within-firm productivity gains, what I call the "within-firm" effect, that further contribute to aggregate industry productivity growth. In our model, we will be able to capture both effects "between-firms" and "within-firm", considering managerial incentives as the source of the within effect.

Managerial incentives (as stocks/equity-based-pay) can be used to alleviate the agency problem by aligning managers' interests with those of the shareholders. Thus when firm owners' provide stronger incentives, the manager exerts effort to reduce marginal cost,

increasing the productivity level of the firm as has been empirically tested by Bulan, Sanyal and Yan (2007).

A contribution of this paper is to provide a model that incorporates the standard principal-agent problem (to characterize the effect of manager's practices on firm productivity) into a heterogeneous firm model of trade with monopolistic competition. We characterize the way trade competition affects firm owners' optimal choice of managerial incentives and analyze in what measure aggregate industry productivity growth results from the interaction of the between-firms and within-firm effects.

The rest of the paper is organized as follows. In the next section, I present the setup of the model describing the role of consumers, firms and managers. In Section 3, I solve for the equilibrium of the model in a closed economy case. Section 4, presents the open economy case. Finally, Section 5 concludes and discusses further research.

2   THE MODEL

In this section we present a monopolistically competitive model of trade with firm heterogeneity and managerial incentives based on Melitz and Ottaviano (2008). The timing of the events is as follows. First, firm's make a decision about whether or not to enter the market. Entering firms have to pay a fixed entry cost f_e and observe their marginal cost c, which is drawn from a Pareto distribution with bound $[0, c_M]$. Each entering firm has a manager. The firm owners decide how much incentive to offer their manager, the higher the incentive the higher the effort he/she exerts and hence the higher the probability that marginal cost will decrease. The effort of each manager is not directly observable, hence the firms are involved in a moral hazard problem where the manager is risk-averse and the firm's shareholders are risk-neutral and maximize their profits net of the manager's payment. Once the manager exerts effort, the firm can finally observe its realized marginal cost c_e, which takes into account the effort of the manager, this is the marginal cost at which the firms faces other competitors. Given c_e the firm decides the optimal output and price in a monopolistic competitive market structure. To ease exposition, I consider first the closed-economy case and then extend my model to the open economy case.

2.1   Consumers

There are L consumers in the economy. Each consumer has one unit of labor which they sell in the market at wage w. Consumers have quasilinear-quadratic preferences which are defined over a continuum of differentiated varieties indexed by $i \in \Omega$, and a homogenous good chosen as numeraire. All consumers share the same utility function given by,

$$U = q_0^c + \alpha \int_{i \in \Omega} q_i^c \, di - \frac{1}{2} \gamma \int_{i \in \Omega} (q_i^c)^2 \, di - \frac{1}{2} \eta \left(\int_{i \in \Omega} q_i^c \, di \right)^2 \qquad (1)$$

where q_0^c and q_i^c respectively represent the individual consumption levels of the numeraire good and each variety i. The degree of product differentiation between varieties is $\gamma > 0$, as γ increases the consumer prefers to diversify his/her consumption across varieties. The parameters $\alpha > 0$ and $\eta > 0$ index the substitution pattern between the differentiated varieties and the numeraire good. The introduction of the numeraire good implies that marginal utilities are bounded; hence a consumer may have zero demand for some goods. We

will assume that the consumption of the numeraire good q_0^c is always positive. The market demand for each variety is then given by

$$q_i = Lq_i^c = \frac{\alpha L}{\eta N + \gamma} - \frac{L}{\gamma}p_i + \frac{\eta N}{\eta N + \gamma}\frac{L}{\gamma}\bar{p}$$ (2)

where $\Omega^* \in \Omega$ is the subset of varieties that are consumed $(q_i^c > 0)$; $\bar{p}$ is the average price of the consumed varieties and N is the measure of consumed varieties in Ω^*. Since marginal utilities are bounded, consumers can demand zero of a particular good. In other words, there is a threshold price level p_{Max}, where, if a good's price is less than this threshold price $p_i < p_{Max}$ then the good will have positive demand otherwise it will have zero demand[1].

This maximum price is defined by,

$$p_{Max} = \frac{\gamma\alpha + \eta N\bar{p}}{\eta N + \gamma}$$ (3)

Then we can write the price-elasticity of demand as,

$$| = \left[\frac{p_{Max}}{p_i} - 1\right]^{-1})$$ (4)

In contrast with the CES case, the elasticity of demand is not constant and will depend negatively on p_{Max} and positively on the price of the good p_i. This is, the 'tougher' the competitive environment -lower average price $\bar{p}$ or larger number of competing varieties N- the lower p_{Max} and hence the higher the price-elasticity of demand at any given price p_i.

2.2   Production and Firm Behavior

We assume labor is the only factor of production and is inelastically supplied in a competitive market. The numeraire good is produced under constant returns to scale at unit cost; its market is also competitive[2]. These assumptions imply a unit wage. Entry in the differentiated product sector is costly as each firm incurs product development and production start-up cost, f_e. Subsequent production exhibits constant returns to scale at a marginal cost c_e. Labor input is a linear function of output, $l = c_e q$, where the realized marginal cost of the firm c_e, is defined as

$$c_e = c - g(c)(e + u)$$ (5)

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[1] The set Ω^* is the largest subset of Ω that satisfies $p_i < p_{Max}$

[2] For simplicity, we do not model any overhead production costs. This would significantly degrade the tractability of our model without adding any new insights.

where c is the marginal cost draw that firms learn after making the irreversible investment f_e required for entry. This draw is from a common (and known) distribution $G(c)$ with support on $[0, c_M]$. The observed cost reduction induced by manager's effort is $e + u$, this term is decomposed in agent's effort e and a pure noise term u with mean 0 and variance σ^2. Function $g(c)$ measures the degree at which the observed cost reduction $(e + u)$ affects firm's realized marginal cost. We will assume that $g(c)$ is a differentiable increasing function. The latter property implies that c_e is sub-modular in c and e, i.e the marginal decrease in the realized cost for a given increase in effort is higher for low-productivity firms. This assumption is necessary to avoid negative realized marginal cost.

Since the entry cost is sunk, firms that can cover their marginal cost survive and produce. All other firms exit the industry. Surviving firms maximize their profits using the residual demand function (2). In doing so, given the continuum of competitors, a firm takes the average price level $\bar{p}$ and number of firms N as given. This gives us the monopolistic competition outcome. Firm maximizes $p_{\pi}(c_e) = p(q)q - c_e q$. Hence, the profit maximizing quantity $q(c_e)$ is

$$q(c_e) = \frac{L}{\gamma[p(c_e) - c_e]}$$

Let c_D be the reference cost at which the firm is indifferent between operating or shutting down. This firm earns zero profit as its price is driven to its marginal cost $(c_D) = c_D = p_{Max}$, and its demand level $q(c_D)$ is driven to 0. We assume that $c_D < c_M$ so the firms between these two levels will exit. All firms with $c_e < c_D$ earn positive profits (gross of the entry and managerial cost) and remain in the industry. The threshold cost c_D is a sufficient statistic that summarizes the effect of both, the average price and the number of firms on the performance measure of all the firms. Hence the performance measure of the firms can be written as a function of their realized marginal cost and the cut-off c_D. From (3) we have that,

$$p(c_e) = p_{Max} - \frac{q(c_e)\gamma}{L} \quad \text{thus,}$$

$$q(c_e) = \frac{L}{2\gamma[c_D - c_e]}$$

$$p(c_e) = \frac{1}{2[c_D - c_e]}$$

$$\mu(c_e) = \frac{1}{2[c_D - c_e]}$$

$$\pi(c_e) = \frac{L}{4\gamma}[c_D - c_e]^2$$

Finally, firm's shareholders choose optimally the manager (CEO) total compensation scheme. Following the CEO compensation literature, managers compensation is decompose on a fixed salary, s, and a performance or incentive-pay b. Thus total compensation for the manager is,

$$W = s + b(e + u)$$

2.3 Managers Behavior

All managers simultaneously choose effort levels given their linear compensation[3], $W = s + b(e + u)$. If we let the random variable W denote the financial wealth of the CEO in the firm, then the CEO's pay-off is represented by the usual additively separable utility function:

$$E[u(W)] - \psi(e)$$

where is the CEO's hidden cost of effort function, which we assume to take the simple quadratic form $\psi(e) = \dfrac{de^2}{2}$. We make an additional simplifying assumption, that the CEO's attitude towards risk can be summarized by the following mean variance preferences

$$E[u(W)] = E[W] - \frac{r}{2}Var[W]$$

where $r > 0$ measures the CEO's aversion to risk. CEOs chose effort level e to maximize their utility given by the mean-variance preferences:

$$\max_{e} E[W] - \frac{r}{2}Var[W] - \frac{de^2}{2}$$

The first-order condition to this problem fully characterized the CEO's optimal action choice:

$$e = \frac{b}{d} \tag{6}$$

Managers accept any contract (s, b) with an expected utility of at least his/her reservation utility $\overline{U}$. Hence the manager's fixed salary s has to satisfied

$$s = \overline{U} - \frac{b^2}{2d[1 - rd\sigma^2]} \tag{7}$$

2.4 Optimal Incentive Contact

The shareholders' (firm owners) problem is to choose the contract (s, b) that maximizes profits net of agent cost, subject to satisfying the manager's participation and incentive constraint. Formally the shareholder's problem is given by,

$$\max_{s,b} E_u[\Pi(c)] = E_u\left[\frac{L}{4\gamma}(c_D - c_e)^2 - s - b(e + u)\right]$$

Subject to

$$\max_{e} \left[E[W] - r/2\, Var[W]\right] - (de^2)/2 \geq \overline{U}$$

---

[3] Note that this linear contract is not the optimal contract given our assumptions but is the one that gives a simple and intuitive closed-form solution for the wage scheme (See Bolton and Dewatripont, 2004).

Enterprise in Turbulent Environment

Combining equations (5), (6) and (7) we can formulate the shareholder's optimal contracting problem as follows,

$$\max_{s,b} E_x[\Pi(c)] = E_x\left[\frac{L}{4\gamma}\left(c_D - c + g(c)\left(\frac{b}{d} + u\right)\right)^2 - \bar{U} + \frac{b^2}{2d}[1 - rd\sigma^2] - b\left(\frac{b}{d} + u\right)\right] \qquad (8)$$

For expression (8) to be strictly concave in the incentive-pay b for any c, we need to make the following assumption,

Assumption 1 $\quad \dfrac{L}{2\gamma} < d(1 + dr\sigma^2)$

This assumption ensures that the optimal incentive-pay b is small enough so that the manager will not cut costs to a level that makes marginal costs negative. The optimal incentive contract in this way is described in the following proposition,

Proposition 1 *When the cost draw of the firm is less than the cut-off $c < c_D$ the optimal level of effort is given by*

$$e = \frac{\dfrac{Lg(c)}{2\gamma d(c_D - c)}}{1 + rd\sigma^2 - \dfrac{Lg^2(c)}{2\gamma d}} = \lambda(c)(c_D - c) \qquad (9)$$

where $\quad \lambda(c) = \dfrac{\dfrac{Lg(c)}{2\gamma d}}{1 + rd\sigma^2 - \dfrac{Lg^2(c)}{2\gamma d}}$, otherwise e=0. Proof: See Appendix.

The optimal level of effort follows an inverse U-shaped pattern in terms of the cost draw c. This is shown in chart 1a, where the optimal effort is graphed against the initial cost draw c or the initial productivity draw $\frac{1}{c}$ in chart 1b. Chart 2 shows the expected realized cost as a function of the initial cost draw. In a model with no incentives the productivity of each firm will be the same as the productivity draw of each firm (the 45^0 dashed line in chart 2), while in a model with incentives each firm's productivity depends on the degree of managerial incentives which is different across firms. At extreme values of productivity, either very high-productive or low-productive firms, it is optimal to provide low level of incentives. High productive firms find it optimal to provide low level of incentives due to little expected productivity gains of an additional unit of effort, and low productive firms provide low incentives due to their lack of profits. Thus only firms in the middle of the distribution of productivity will provide the highest level of incentives, as we can observe in Chart 1a and Chart 2.

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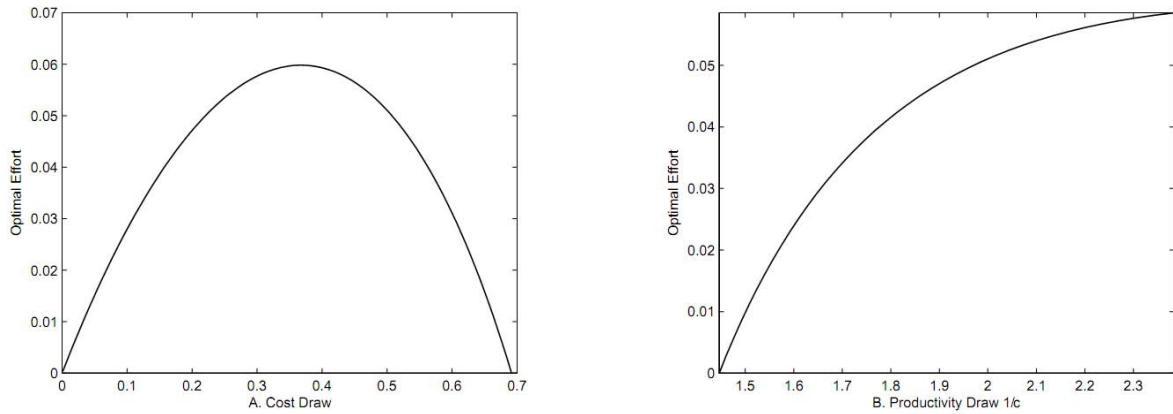
Chart 1: Equilibrium Level of Effort
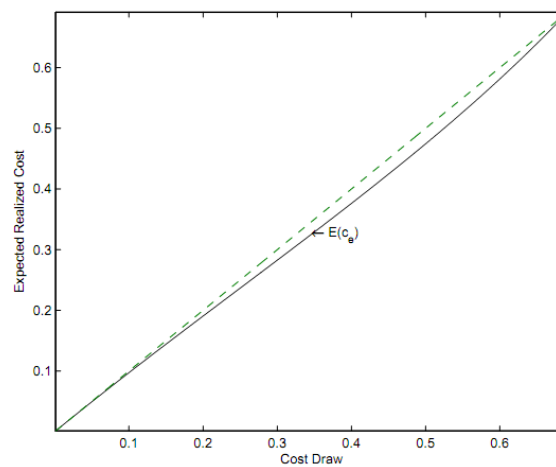
Chart 2: Expected Realized Cost

Given the optimal effort level, we can rewrite the expected value of a firm profit net of agent costs, as a function of the initial cost draw and the parameters of the model[4].

$$ E_u[\Pi(c)] = (c_D - c)\frac{L}{4\gamma} + \frac{L}{4\gamma}2g(c)\lambda(c) + \frac{L}{4\gamma}g^2(c)\lambda^2(c) - \frac{\lambda^2(c)d}{2}[d+\sigma^2+1] + \frac{L}{4\gamma}g^2(c)\sigma^2 \qquad (11) $$

2.5   Free Entry Equilibrium

Firm expected profit -net of entry cost- is $\int_0^{c_D} E_u[\Pi(c)]dG(c) - f_E$. Firms will entry the market until profit is zero. This yields the equilibrium free entry condition

$$ \int_0^{c_D} E_u[\Pi(c)]dG(c) = f_E \qquad (12) $$

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[4] Without loss of generalization we normalized $\overline{v} = 0$.

which determines the cost cut-off c_D. Given a production technology $f(c)$, from equation (12) we can determine the behavior of c_D in terms of the fundamentals

$$c_D = h\left(\overset{-}{L}, \overset{+}{\gamma}, \overset{+}{f_e}, \overset{+}{c_M}\right)$$

The larger the market size or the lower the sunk cost f_e, the 'tougher' is the competitive environment (c_D lower) as more firms enter the market and average price decreases. In all these cases, firm exit rate is also higher (since the pre-entry probability of survival $G(c_D)$ is lower). We will analyze in more detail the comparative statics in Section 3.

2.6   Parameterization of Technology

Our results so far do not rely on the particular parameterization of technology. In order to simplify the analysis we use a specific parameterization for the cost distribution. Following Melitz and Ottaviano (2008) we assume that the distribution of cost draws given by,

$$G(c) = \left(\frac{c}{c_M}\right)^k \ for \ c \in [0, c_M]$$

The higher the shape parameter k, the larger is the fraction of firms with marginal cost close to the bound c_M. As k goes to infinity the distribution becomes degenerate at c_M. The productivity distribution of surviving firms will therefore also be Pareto with shape parameter k, given by,

$$G_D(c) = \left(\frac{c}{c_D}\right)^k \ for \ c \in [0, c_D]$$

Hence given the Pareto distribution and equation (11) the solution for the cut-off c_D will be obtained by solving,

$$\int_0^{c_D} \left[(c_D - c)^2 \left(\frac{L}{4\gamma} + Z\right) + \left(\frac{L}{4\gamma}\right)g^2(c)\sigma^2\right] dG(c) = f_e \tag{13}$$

Where $Z = \frac{L}{2\gamma}f(c) + \frac{L}{4\gamma}f^2(c) - \lambda^2(c)\frac{d}{2}[1 + d r \sigma^2] > 0$. By Leibniz rule this implies that the cut-off point in an economy with incentives is lower than the cut-off point in an economy without incentives). The cut-off point of an economy with no incentives is given by the solution of the free entry condition $\frac{L}{4\gamma}\int_0^{c_D} (c_D - c)^2 dG(c) = f_e$, as in the Melitz-Ottaviano (2008) model. Hence, the inclusion of incentives makes the economy more competitive since now every surviving firm will have the option to endogenously affect its own productivity, making all surviving firms in the market

more productive than before. We also assume that $c_M > \sqrt{\dfrac{[2(k+1)(k+2)\gamma f_e]}{L}}$ to ensure that $c_D < c_M$.

that.

In order to simplify our analysis and do comparative static we include two additional parameterization assumptions in our model. We assume that $g(c) = c$, and that u is uniformly distributed with mean 0 and variance $\sigma^2 \leq \dfrac{(1 - e_{Max})}{3}$. These two assumptions ensure that the realized costs are always positive for any surviving firm (i.e $c_i e \geq 0$).

3   CLOSED ECONOMY ANALYSIS

In this section we discuss some of the predictions of the model regarding the relationship between competition, managerial incentives and aggregate productivity. In contrast to previous theoretical models our model suggests two channels through which competition affects industry's aggregate productivity: the entry cut-off c_D (same as in Melitz, 2003 and Melitz-Ottaviano, 2008 model) and the incentives level of each firm which affect within-firm productivity.

Proposition 2 *An increase in market size (L) or in product substitutability (lower γ) leads to stronger incentives for sufficiently high productive firms and lower incentives for low productive firms. While a decrease in the sunk entry cost (lower $f_i E$)   leads to lower incentives for all the firms.*

Taking partial derivatives of equation (9) we obtain,

$$\frac{\partial e}{\partial L} = \frac{\partial \lambda(c)}{\partial L}[c_D - c] + \frac{\partial c_D}{\partial L}\lambda(c) \qquad (14)$$

Where $\dfrac{\partial \lambda(c)}{\partial L} \geq 0$ for all the surviving firms (i.e. all) and $\dfrac{\partial c_D}{\partial L} < 0$ (see proof in the Appendix). Hence for sufficiently high values of c (low-productive firms) the first term on the right hand side of equation (14) will approach zero and thus the second term will dominate, making $\dfrac{\partial e}{\partial L} < 0$, the opposite holds for sufficiently low values of c (high-productive firms).

Intuitively, an increase in the toughness of competition -caused either by an increase in market size or in product substitutability- leads to two effects that work in opposite directions: *business-stealing effect* and *scale effect*. First, an increase in market size will make the demand faced by each firm more elastic, making it easier for each firm to increase its quantity demanded by cutting its price. In this environment, is optimal for firms to provide stronger incentives to the manager in order to reduce marginal costs, this is known as the *business-*

stealing effect. Second, an increase in market size makes firm $i's$ rivals charge lower prices, which makes average price, $\bar{p}$ fall, resulting in a decrease in firm demand. A lower demand leads firm i to provide weaker managerial incentives, this is known as the *scale effect*. In previous literature, the net effect of these two forces was ambiguous; however in the particular model studied here the net effect will depend on each firm initial cost draw c. For firms with sufficiently high cost draw the business-stealing effect will dominate the scale effect, otherwise the scale effect dominates the business-stealing effect. Chart 3, shows how each firm optimal level of incentives reacts given a 1% increase in market size. As can be observed from the graph below, firms that have a sufficiently low cost, increase their level

of incentives (b) and thus their effort level ($e = \dfrac{b}{d}$), while the opposite holds for firms that have high cost.

Furthermore, Chart 4 shows the change in firm's quantity sold when market size increases. In the case of high-productive firms, an increase in market size will bring an increase in quantity sold, due to two factors, the larger market and the increase in productivity due to stronger incentives. On the contrary, low-productive firms will decrease their quantity sold losing market share, mainly because they face higher competition (c_D lower) and provide lower level of incentives.

On the other hand a decrease in the sunk entry cost, f_e incentivizes firms entry, resulting in more firms in the market. Since market size remains constant, each active firm faces a reduction in market share. Hence the *scale* effect dominates the *business-stealing* effect and all the firms provide weaker managerial incentives to reduce cost (See proof in the Appendix).
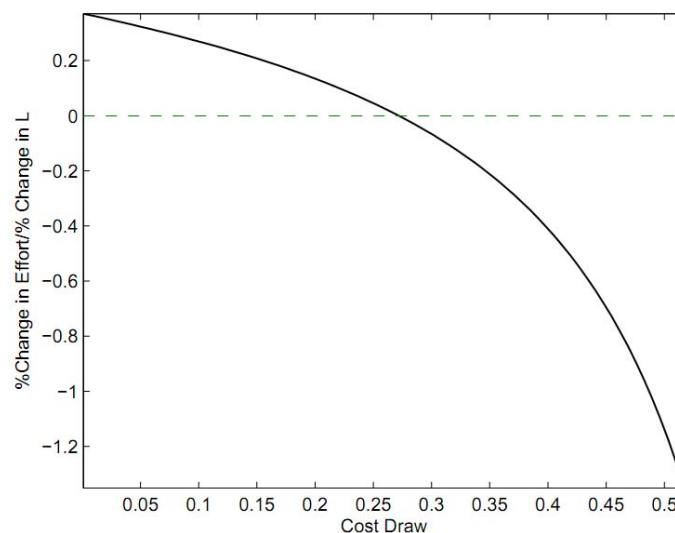
Chart 3: Change in optimal effort due to change in market size

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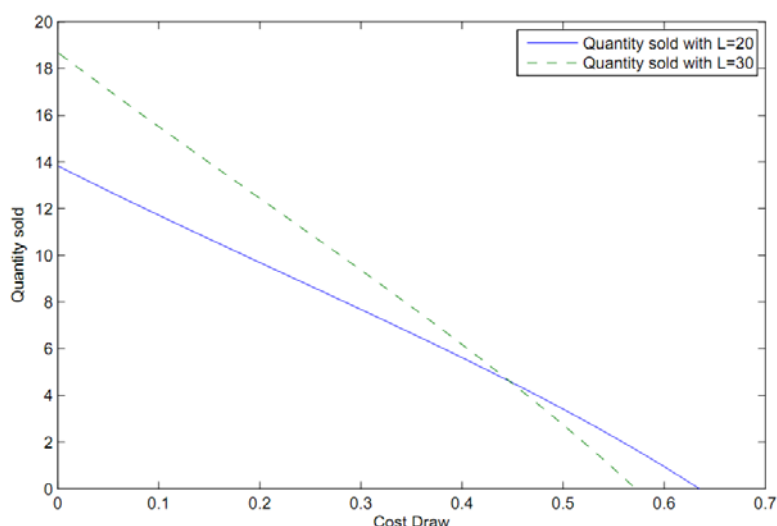
Chart 4: Quantity sold and market size

In order to evaluate the aggregate effects of an increase in competition, we examine a number of numerical calculations over the threshold c_D. The following comparative statics hold -at any parameterization of the model- when assumption 1 is satisfied. However, for illustration purposes we report on the numerical calculation of a benchmark case[5].

First we analyze the effect of market size on the entry cut-off level. Results are shown in Chart 5, as we can observe the entry cut-off is a decreasing function of the market dimension (L). This result emphasizes the pro-competitive effect of an increase in market size which is consistent with previous literature on heterogeneous firms (Melitz, 2003; Ottaviano and Melitz, 2008; Yeaple, 2005). Comparing the effect of market size in the managerial incentives scenario versus the original model of Ottaviano and Melitz (2008) we found that the pro-competitive effect is stronger in presence of managerial incentives, since productive firms find it profitable to increase their productivity by means of stronger incentives.

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[5] Following the CEO compensation literature we model the coefficient of risk aversion to be equal to 3 (Lambert et al., 1991 use constant absolute risk aversion between 0 and 4 whem modeling CEO compensation portfolios). The index of product differentiation γ takes the value 0.5, and sunk entry cost $f_e = 1$ (as in Borin 2008). Following Ottaviano et al. (2006) calibrations the shape parameter of the pareto distribution takes the value $k = 2.$ Market size L=20, the disutility of effort takes the value of 5. This parameterization leads to the equilibrium cut-off of $c_D^* = 0.69$.

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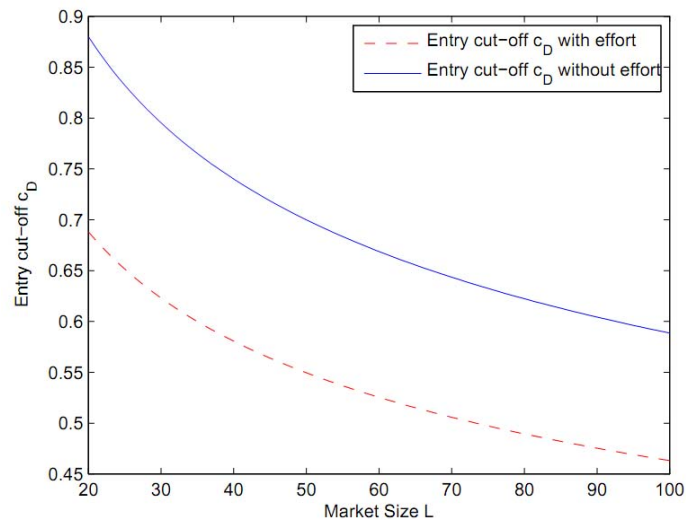
Chart 5: Market size and entry cut-off

Second, we analyze the effect of an increase in market size (L) or increase in product substitutability (lower γ) over the aggregate effort of surviving firms

). As we mentioned in proposition 1, productive firms find it profitable to provide higher incentives (thus obtaining more effort from managers) given an increase in market size, while less productive firms optimize reducing their incentives. Our various simulations have proven conclusively that the increase in incentives by the more-productive firms over-compensates the decrease in incentives of the less-productive firms, leading to an overall increase in the industry's aggregate effort. Given our baseline parameters, a 1% increase in market size increases aggregate effort by 0.27%. This holds consistently for different values of market size.

Finally, we analyze the effect of an increase in market size over the industry's aggregate productivity. The expected aggregate marginal cost (which is proportional to industry's aggregate productivity) is decomposed into two sources between and within:

$$c_e = \underbrace{\int_0^{c_D} c \, dG_D(c)}_{\text{Between}} - \underbrace{\int_0^{c_D} g(c)\lambda(c)[c_D - c] dG_D(c)}_{\text{Within}}$$

In contrast with previous literature on heterogeneous firms (that attributes changes in aggregate productivity to only the between-firm, or reallocation, effect as in Melitz (2003) and Melitz-Ottaviano (2008) our model goes one step forward and incorporates within-firm productivity changes through the inclusion of managerial incentives. The industry's aggregate productivity is higher ($\bar{c}_e$ smaller) in a model with incentives than in a model without incentives due to: (i) the cut-off with incentives is smaller than the cut-off with no incentives (as in Chart 5), thus the *between* effect is smaller (ii) in a model with incentives each firm has the option to increase its productivity by providing incentives to his/her manager, this is the *within* effect (see chart 2). Table 1 presents a decomposition of the aggregate marginal cost for different levels of market size.

Table 15: Decomposition of Aggregate Marginal Cost

L	Between Mean	Within Mean	$\overline{c_\theta}$
20	0.46	-0.13	0.33
30	0.42	-0.11	0.3
40	0.39	-0.1	0.28
50	0.37	-0.098	0.27
60	0.35	-0.093	0.26
70	0.34	-0.089	0.25

We claim that an increase in market size (L) or in product substitutability (lower γ) leads to a decrease in aggregate marginal cost (i.e. a proportional increase in the industry's aggregate productivity). Our claim is in-line with previous literature, but in our case the aggregate effect is intensified due to the inclusion of managerial incentives. All the numerical calculations we have made provide support to this claim. Table 2 presents the effect of a 1% increase in L over the aggregate marginal cost showing both the between and within effects. Intuitively, increases in market size, increase the toughness of competition (lower c_D), generating first, a reallocation of market share from the less-productive firms to the more-productive firms (between effect); and second, an increase in expected productivity of the more-productive firms (within effect). Both effects lead to an increase of industry's aggregate productivity.

Table 2: Decomposition of Aggregate Marginal Cost

%Δ Between	%Δ Within	%$\Delta\overline{c_\theta}$
-0.42	-0.27	-0.69

*These values hold for different levels of market size L.

4 OPEN ECONOMY ANALYSIS
To be completed and submitted ASAP.

5 CONCLUSION
We present a model that predicts how industry responds to changes in the competitive environment. In contrast to previous work that considered firm productivity as given, in our model firm productivity is endogenously affected by firm's incentives to their manager. The higher the incentives, the higher the probability the firm's marginal cost will be reduced. Our model characterizes the way competition affects firm owners' optimal choice of managerial incentives and how aggregate productivity growth results from the interaction of the between-firm and within-firm productivity growth.

We show how market size affects within-firm productivity: larger markets induce the more-productive firms to provide stronger managerial incentives, increasing the probability of higher level productivity; but reduce the incentives and hence the likelihood of higher productivity for low-productive firms. We then analyze how the introduction of incentives affects the selection of heterogeneous producers into the market. A model with incentives generates lower entry cut-off level of marginal cost than a model with no incentives. This is because in the former, each surviving firm can increase its productivity by providing incentives to the manager, hence making the market more competitive.

The model predicts that an increase in market size or increase in product substitutability leads to an increase in the industry's aggregate productivity. Beside the reallocation effect, studied in previous works as the single channel of how market competition affects aggregate productivity, our model adds the within-firm productivity channel as another possible source of aggregate productivity change. The relevance of each channel will depend on the main cause of change in the competitive environment (market size, entry cost, product substitutability or trade) and the parameters of the model. Consequently, empirical calibration is needed to fit the model to the data.

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Enterprise in Turbulent Environment

CHANGING ORGANIZATIONAL CULTURE FOR ENTERPRISE PERFORMANCE

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ABSTRACT
The purpose of this paper is to show the importance of organizational culture in improving the performance of Romanian small and medium enterprises(SMEs). The research was conducted in 40 SMEs inthe North-West area of the country. The method of research used was the survey. The instrument used was a questionnaire that included 35 organizational characteristics considered by the authors the most important. The main idea of the research was that after the employees complete the online questionnaire the manager can receive a complete report about the answers, underlyining the weaknesses and strengths of the organizational culture according to the answers. The evaluation of cultural weaknesses and strengths is made after a guideline established considering the scales included in the questionnaire. After this phase of the research, if the manager wishes we can provide him with a set of strategies to mend the problems(the weakenesses). This step is very important because many researches regarding organizational culture just diagnose the type of culture but do not offer solutions for the problems. Changing culture is a difficult task and a long-term one, but in our opinion change is more easy to achieve considering the special attributes of SMEs and the period in wich culture may be changed will be shorter. Any change within an organization must start with the change of culture.

Keywords: Enterprise performance, Organizational culture, Small and medium enterprises

1 INTRODUCTION

Organizational culture is a quite new term for the Romanian enterprises. Few are the companies that take in count organizational culture when they elaborate the strategies and set the objectives for their organization. That is why few recognize the importance of organizational culture and the influence it has on the organizational performance. In a moment in wich the economic crisis daily dizolves dozens of enterprises, SMEs fight for survival. The author's belief is that this sector of the economy is the key of economic revival.

The research had as main purpose the analysis of organizational culture in 40 SMEs from the Cluj county and the observation of the link between organizational culture and the financial performances of the enterprises. Also the authors wanted to elaborate a methodological set of rules that can be applied to any enterprise not just to the ones in this study, in order to diagnose quick and efficient the main components of organizational culture, to detect the problems appeared and to take the best measures in order to mend the cultural problems and initiate the process of organizational change.

In the recent years the researchers are in search of a model of demonstrating a link between organizational culture and enterprise performance. The direct linking between organizational

culture components and performance is not a new idea. But it is an idea that few managers take in count when defining the strategies of their enterprise. One can say that is difficult to link two notions so different such as organizational culture (a qualitative dimension) and performance(in most cases a quantitative dimension defined through indicators). Organizational culture through it's specific values influences directly the way objectives, policies and strategies are made in the enterprise.Organizational culture through it's elements contributes to the increase of the competitivity of the enterprise. As far as organizational culture means respecting norms and ethics in the business, keeping and improving interpersonal relations, team work, keeping and developing traditions, creating and transmitting the most powerfull values and convictions, the competitivity of the enterprise is maintained or even improved.

The objective of studying organizational culture is to help understand organizational life more. Understanding organizational life is important as it is widely acknowledged that organizational cultures have an impact upon company performance. The idea began with the simple observation that small and medium enterprises were very affected by the crisis, many facing bankrupcy.

Culture is a multi-dimensional concept that can be applied to firms, industries or nations. A review of existing literature yields an array of definitions of culture. By far one of the most widely accepted definition is proposed by Schein (2004), who defines organizational culture as "a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid, and therefore, to be taught to new members as the correct way you perceive, think, and feel in relation to those problems".

Culture matters. It matters because decisions made without awareness of the operative cultural forces may have unanticipated and undesirable consequences. Not only does culture reside within us individuals, but It is also the hidden force that divides most of our behavior both inside and outside organizations (Schein, 2004). The essence of culture is not what is visible on the surface. It is the shared ways groups of people understand and interpret the world. If culture is to be analyzed and managed, it is important that we be clear about what is meant by the term. Failure to clearly specify what "culture" is can result in confusion, misunderstanding and conflict about its basic function and importance (O'Reilly, 1996).

The authors wanted to present a software solution any manager could use, to rapidly assess some of the basic elements of organizational culture from his enterprise and get the best measures to address the weaknesses resulting from this analysis. It is not the first time this idea appears in researches. Many consulting firms have conducted surveys that were sent to firms to be completed online and then have made so-called cultural profiles, defining companies in a particular cultural group. However we notice that the researches are missing the other side, equally important to any assessment, the solutions for improvement.

Continuous performance must be the primary objective for any organization because only through performance organizations have the possibility to progress and evolve. When selecting to use financial performance indicators one of the motives was that using them is easier for a person outside the organization to evaluate performance using those indicators. And also the limited resources and refuse of the managers in helping us did not permit us to make a more deeper analysis of the enterprise performance.

SMEs have a more organic culture than big organizations. A small number of people are usually united under common beliefs and values and that means that in SMEs changing organizational culture should be easier. The most influence on the organizational values and beliefs in SMEs has the owner. This was the main reason we focused our research on the SMEs in Romania. The recent economic crisis had a bad influence on the financial performances of the majority of the enterprises in Romania. But the most hit sector was the sector SMEs. So in order to avoid future problems and to begin reconstruction organizational culture must be diagnosed and the change must begin with it. The authors consider that organizational culture change would be easier to achieve in SMEs and would not require 10-15 years as in big companies.

2   METHODOLOGY

The research was conducted with the aim of verifying one main hypothesis (the organizational culture influences the financial performances of the firm) and 35 secondary hypothesis, that were the same with the main characteristics included in the final questionnaire. The method used to collect data was the survey technique. The instrument used was the questionnaire sent through email to firms in the Cluj county. The online questionnaire was realised on the Google Docs platform. The questionnaire was structured in three parts. The first part contained 25 statements about the organization with responses possible on a Likert scale from 0 to 5. The second part contained 20 organizational characteristics and the respondents were asked to give a note from 1 to 5 according to the importance in their organization of each characteristics. The final part contained questions about the organization including year of foundation, domain of activity and number of employees.

The domain of activity for the enterprises used for this study is presented in chart 1.

Chart 2 presents the size of the enterprises that participated to our research, in number of employees.
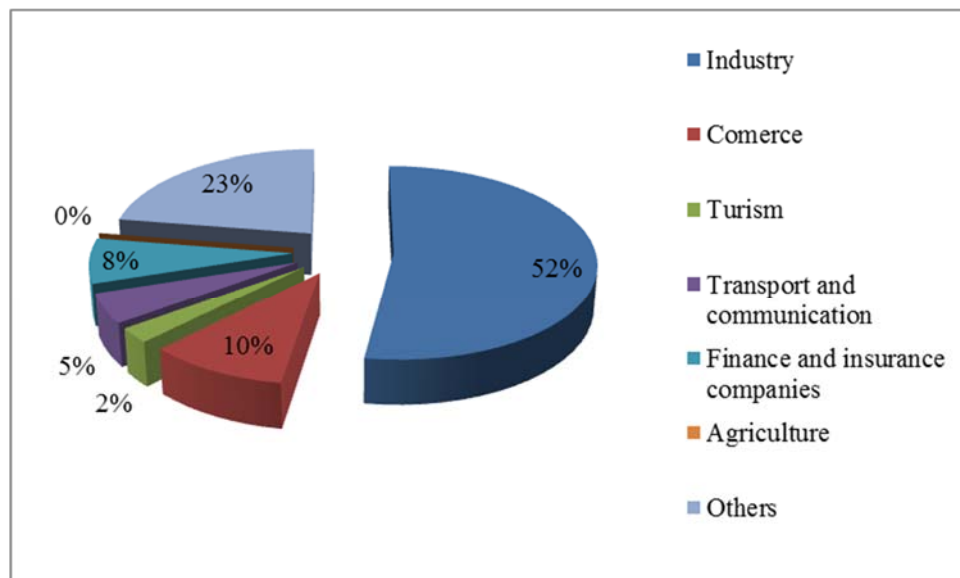
Chart 1: Domain of activity of the enterprises that participated in the research

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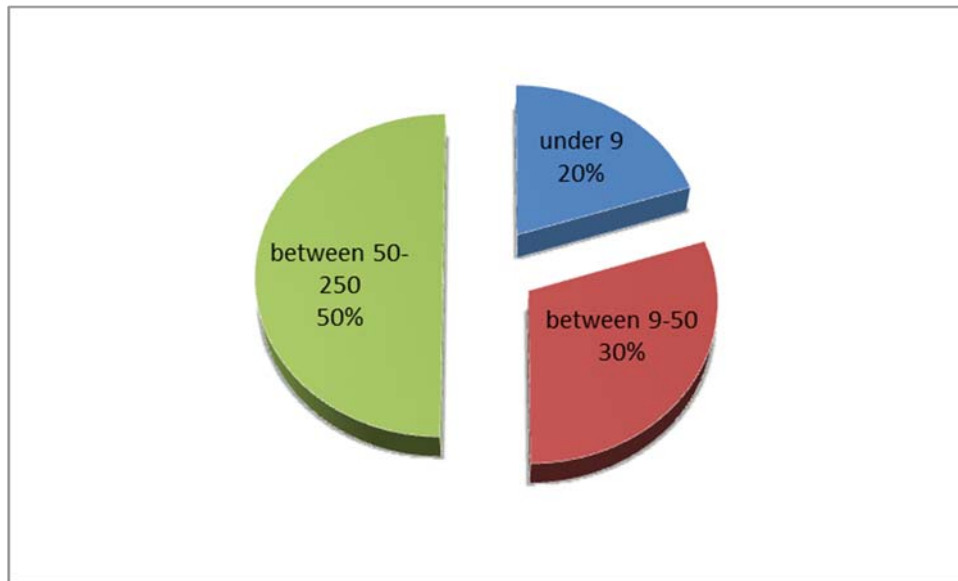
Chart 2: Size of the enterprises that participated in the research in number of employees

After observing the results of the organizational culture questionnaire for the first part the components with scores bellow 2,8 were considered weaknesses and the components with the scores above 3,7 were considered strengths. For the second part of the questionnaire strengths were considered the components with the scores over 3,7 and weaknesses those with scores below 3.

The survey achieved a cultural profile of each company, and the results were grouped into strengths and weaknesses. This classification aims at differentiating the points where must be made changes to remedy the cultural issues. The study included an analysis of key performance indicators belonging to the SMEs considered thus observing that most companies have problems in terms of profit, which should be a warning. The economic crisis may be a motive for this problems, but evaluating the results obtained from questionnaires centralization it is observed that the same companies with the biggest problems have recorded the worst results in terms of organizational culture.

The guide for resolving the weaknesses was developed by the author in collaboration with several managers of SMEs that have problems to highlight the applicability of the guideline and the importance of continuing research in this area. Discussions with managers were conducted based on a interview draft with free answers and the topics were restricted to the characteristics of organizational culture contained in the questionnaire. The guideline contained the most important cultural characteristics, and these were presented in a booklet.

In order to evaluate the financial performances of the enterprise we used financial performance indicators.The performance indicators were calculated using the data on the Ministery of Finance site. The number of indicators was limited because on the site you can not find all the data needed in order to calculate all financial indicators. So the authors used the following performance indicators: return on gross business, return on net trade, the return on investment, return on equity, general liquidity ratio, acid test, financial leverage, rotation of total assets.

In order to exemplify adequate the methodology used we will present the steps on a case study, underlyining the fact that this were the steps used for each of the 40 enterprises in the study. The conclusions will be presented generally.

3   RESULTS
The enterprise on wich we present the method is from the communication domain and has till now 20 years of activity in the field of IT components.

The first step in our research was to look for the mission and values the leadership of the enterprise states on the web page that presents the enterprise. The mision stated was:
»Helping clients to capitalize their potential by providing advanced integrated solutions hardware - software – communications and by personalizing the products and services depending on the needs of each customer.«

Declared values:
- Commitment to the client;
- Commitment to the employees;
- Commitment to the partners;
- Work environment that promotes teamwork;
- Jobs based on performance challenge;
- Various forms of training for job satisfaction;
- Listening carefully to customers.

The scond step was to centralize the results of the questionnaires and to determine wich of the cultural characteristics are strengths and wich are weaknesses for this particular enterprise. Table 1 presents the results of this second step of the methodology.

Table 1: Strengths and weaknesses regarding organizational culture

STRENGTHS	WEAKNESSES
Stability	Low motivation
Professional development for the employees	Lack of innovation
Corectitude	Poor organization
Good communication	Low adaptability
Competitivity	
Quality	
Enthusiasm	
The attachement for the organization is encouraged	
The employees trust the leadership	
Team work	
Long term planning	
Continuous improvement	
Good reaction to the global economic crisis	
Interest for the welfare of the employees	

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Comparing the stated values and the ones resulted from the questionnaires we can observe that there is no big diference. The enterprise is competitive, has interest in the welfare of the employees, promotes quality and communication in this way underlining the fact that this company endeed is interested both in its employees and its customers.

After evaluating the organizational culture the third step was responsible for the evaluation of the financial performance indicators. Table 2 presents the eight performance indicators that could be calculated with the data available for years 2009, 2010 and 2011.

Table 2: Performance indicators for the enterprise considered

Indicator	2009	2010	2011
RC_b	0.09	0.11	0.13
RC_n	0.08	0.1	0.11
RI	0.17	0.29	0.19
RF	0.34	0.67	0.63
RLG	2.17	1.74	1.78
RRL	1.88	1.57	1.46
PF	2.07	2.30	3.26
ROA	2.09	2.89	1.71

One can easily see from the data presented that indeed this enterprise has no problems beacuse of the global economic crisis and the values stated by the leadership are present also in the category of the strengths after evaluating the questionnaires. Also we can observe that the weknesses are points that characterize the whole sector of SMEs in our country such as lack of innovation and adaptability. But this enterprise does not have such big problems concerning organiazational culture and this problems may be mended by initializing an organizational change, starting with the structure because this was one of the weaknesses.

Regarding the fact that organizational culture influence4s organizational performance we can say at this point that we strongly believe that the fact that this enterprise has more strengths than weaknesses and that the financial indicators have good values considering the economic state of our country is the result of the positive influence that a strong organizational culture has on the financial results of an enterprise. To underline the fact that this a case study and that each organization has it's own culture and characteristics.

We consider that this guideline in four steps can be applied to any enterprise and can be the first step in initializing the organizational cultural change.

4 CONCLUSION

The most important point of this research is to highlight the characteristics of the organizational culture in Romanian SMEs and to initiate an analysis that can prove that were there are strong cultures there is performance. These data collected and analysed can not be generalised. After analyzing the enterprises we could observe that many have financial problems due to the global economic crisis. Our important point is that if an organization seeks to make changes to increase performance the first point is to analyze and change organizational culture. Without a strong culture performance can not be at the levels desired. The financial indicators show the economic problems that SMEs had to face during this turbulent period of crisis and the cultural analysis revealed the fact that problems also come from inside the organization.One can not achieve performance when employees are not involved in decision making, when procedures are not respected, when innovation is not a priority, when people think negative or when appears any of the weaknesses we found in the enterprises. Without managers understanding the importance of organizational culture the step ahead con not be made and performance in the true meaning will remain just a dream. Organizational culture is the most important component of the organization. It is imperative to known the elements of organizational culure so that we can use the strengths for competitive advantage. It is not simple to diagnose organizational culture and it can not be modified in one year, but the authors consider that without diagnosing and changing organizational culture the organization can not achieve performance. Change must begin with the culture. It is very important for every manager to know to use the strengths of his own enterprise and the weaknesses of the competitors.

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ROLE OF MARKETING IN FORMING OF EFFECTIVE PROFESSIONAL ORIENTATION SYSTEM

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ABSTRACT
The main goal of the professional orientation is to forward the youth to choose the profession suitable to their aims, skills and the demands of the labour market. To provide the choice of the youth future profession and at the same time to decrease the amount of the college dropouts the professional orientation system in Latvia has to be developed and promoted. In its term to offer the competitive specialists by vocational education institutions, the cooperation among vocational education institutions and employers and entrepreneurs has to be promoted to improve study programs and to train skilled manpower. Professional orientation can be compared with product, that functions and satisfies client's needs in certain segment. Marketing helps to explore the situation in the market, to choose the most appropriate ways of the product promotion and to emphasise product's strong points. Use of the effective marketing strategy gives better possibility to inform the youth about the work of Career centre consultants in Latvia and with the help of career consultant the young person can make wilful and independent decision of career planning. On the other hand education institutions cooperate with entrepreneurs and it also needs marketing activities for successful cooperation and information change. From the marketing point of view, explicit target audience helps in choice of correct marketing events. One of the current and brightest means of marketing is the advert in internet.

Keywords: Employer, Marketing, Professional orientation

1 INTRODUCTION
Competition between professional education institutions increases with every year; it is substantially affected by demographical and economic factors. One of the ways how to increase competitiveness of Professional education is development and effective use of marketing complex. Before marketing strategy implementation one should verify if professional education institution aims and resources conforms to needs of target auditorium, that can be divided into two parts – inner and outer client. Main mission of professional education – to support competitiveness and development of enterprise and industry. Professional education institutions require development in order to attract new talents, to offer options of growth, to satistfy interested parties and to compete in market more effectively; to choose marketing strategy, the level of marketing activities must be defined: responsive marketing anticipative marketing or need-shaping marketing.

2 EVALUATION OF PROFESSIONAL ORIENTATION OF LATVIA
State has to consider development of Professional Orientation system, where students, starting from elementary school, would be involved. By choosing certain profession student can have a concept of what does his chosen profession involve and what skills have to be developed. I suggest to develop united professional career information system in internet, with an options to visit other websites, that would offer more precise and specific answer to a question and to find the best solution, by choosing activities that would improve chances of future career and would help to develop new professional competences.

There should be developed entrepreneurs support program, that would motivate the above mentioned ones to provide opportunities of internship for students of professional education institutions.

Transition from secondary school to professional and higher education (e.g. college, vocational school) has to be organised in several stages, as that may help to anticipate different versions of possible problems, whereas transition would help to choose career more successfully. Problems depend on individual, social networks, society, cultural and institutional circumstances. Although previous pschological research pays attention to one's career and its transition, there hasn't been much of studies on peer opinions on choices of youth. Nevertheless, it is undeniable – opinion of friends and peers is of a great importance while choosing the education institution to develop one's career (Dietrich, Parker and Salmela-Aro, 2012, pp. 1575–1593).

Means of advertising for professional education must be chosen in compliance with youth perception, age peculiarities. Social networks and internet influence on youth career choice keeps expanding.

Some of the most important marketing skills are communication and promotion. Promotion is part of the communication and includes enterprise information that stimulates awareness, interest and purchase of the product. Promotion cannot be effective if it does not attract attention. Nowadays we are over flooded with printed, broadcasted and electronic information. Every year we interface 2 million websites, 18 thousand magazines and 60 thousand new books. That is the reason why marketing specialists must do research on how people that are in the same target audience, divide time and attention. Marketing specialists are looking for the optimal way on how to attract more of consumers behavior. Marketing specialists to attract the attention use movie stars, sportsmen, highly-respectable people that are close to target audience shocking stories, statements or questions, etc.

If free advertising opportunities in internet are used skillfully, every owner of website, portal or vortal can increase numbers of visitors. The most popular way is to feature free information in the internet search engines, although, this is also not a faultless way.

It would be great advantage if youth, before making his choice of profession and education institution, had a chance to "be a shadow" in enterprise, organization. Chance to experience and see his future profession might help youth with independent right choice.

Municipalities in Latvia provide career consultants for students of secondary schools, however, there has not been developed united activities conception, and information is not available for all the students. The opportunity to have a consultation most often depends on administration of elementary or secondary school, form teacher. In my opinion, Latvia needs united professional orientation system that is being advertised and is available to everybody, including parents of the students.

Now there are 54 career consultants actively working in Latvia, 11 (20%) of them are in charge of different regions, and 43 (80%) are in charge of cities.

There is another group of people in career education sphere. They are appointed right in the schools by choosing the most appropriate candidate from staff. Currently the number of above

mentioned people in Latvia is 54, some of them work also as teacher – career consultant. 76% out of 54 consultants are in charge of regions, and 24% are in charge of cities.

Professional education contents adequacy to labour market demands is provided by existence and topicality of profession standards. Currently organizations of employers are not able to take full responsibility development of profession standards and description of proficiencies. Therefore it is being done by Ministry of Education and Science. Nevertheless, activity, initiative and skills of employers throughout this process is insufficient. Profession standards have not been developed to all the professions demanded in the labour market, as the process of creating new professions are still ongoing. Market economy, by nominating new demands for professional qualification, develops more rapidly than offer of adequate professional education programs. Significant issue that delays purposeful contribution in professional education is undefined demand of economic sectors in middle-term (http://www.aic.lv/ENIC/lat/lno/prof_1999/3.htm).

3 OPPORTUNITIES TO POPULARIZE PROFESSIONAL EDUCATION INSTITUTIONS

The most popular ways of advertising professional education institutions in Latvia are:

- Repetition – guarantees recognition;
- References to the popularity of institution – joining institution because of the crowd effect;
- Sharing of experience – experts or students that currently study in particular institution tell about it;
- Pressure – students are invited to join in while there are openings to free studies;
- Associations – efforts to associate institution with e.g. some particular celebrity.

Author of the paper holds a view that PR is a powerful tool, but its potential is not fully reached to popularize professional education in Latvia.

Developing and keeping in touch with journalists is significant precondition of work with media. In that way, mutual trust promoting relationship is built. Once in a while it is advisable to contact journalists and to inform them about activities or updates of education institution, as during the conversation joint idea as about new articles of institution may rise. In most cases exchange of communication happens when education institution organize some of the following events – professional competitions or research conventions.

The goal of the PR is to develope and build image of institution. Image is the concept that person of group of people ensue while evaluating the entity (Herbst, 2006). Valuation entity can be (Herbst, 2006, p. 184):

- Person,
- Location where the action takes place,
- Idea.

For instance, if target auditorium sees institution as respectable, trustworthy partner of communication, then institution is known as social and competent. Client knows he will receive high-quality services, that satisfies his dreams and expectations. Clients see it as an important factor therefore wants to use its services.

Why is image so significant? It helps to be competent by substitution knowledge. Nowadays noone can be aware of everything tha thappens around. On the ground of his concept, client evaluates if institution supports his values. Author emphasizes importance of image in one's choice of education institution.

Audience needs a concept about institution to be able to have an opinion of it and to make decisions. Why is image significant to institution ? Image affects perception and defines target audience attitude. If image is positive, so is the response form target audience, they will participate in events organised by institution, visit «Open Door Days or Informative Days ». That is why it is important for institutions to develop and build positive concept of themselves. If institution is innovative and progressive but is seen as traditional, it is possible to change the image – by leaflets, Open Door Days, communication with journalists.

4 CONCLUSION

- United professional orientation system, that would help students, starting already from the elementray schools, should be developed in Latvia.
- Career consultants should be obliged to cooperate with entrepreneurs and Professional education institutions in order to provide more effective consultations and help youth with choice of suitable profession and education institution.
- Before marketing strategy implementation one should verify if professional education institution aims and resources conforms to needs of target auditorium.
- In order to popularize education institutions the PR instruments should be used, as target auditorium trusts them more.
- Education institution has to communicate with its target audience on regular basis, in that way positive image is created.

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CUSTOMERS' PERCEPTIONS TOWARDS BANKING SERVICES

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ABSTRACT
Good marketers think to make a first time sale as not the end of a process but as the starting point of the relationship with the customers. It is necessary to protect added value if a firm wants to create and extend long-term relationship with the customers. Developing close, cooperative relationship with customers is more important in the current era of intense competition and demanding customers, than it has ever seen before. Public sector banks in India are facing tough competition from the private and foreign banks. Managing good customer relationships and offering products as well as services as per the convenience of customers is the most challenging task to the present day bank. Employee behaviour, bank location, layout, cleanliness, timely service, online banking services etc. are becoming the determinants of success or failure of the banks. The present study is a modest attempt to examine the perceptions of the customers towards banking services. The prominent banking organizations both from public sector (SBH) and private sector (ICICI) were studied.

Keywords: CRM, Employee behaviour, Information Technology

1 CONCEPT OF CRM
"Customer Relationship Management is a comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer".

According to Ferguson (2000), CRM is basically a technology that allows a business to store and sort information about customers' preferences, purchase histories, and demographics. The business uses this data to customize its marketing strategies and delivery methods, making them more efficient for both buyer and seller.

According to CRMGuru.com (2001), CRM can be defined as "a process designed to understand and anticipate the needs of current and potential customers."

Thompson (2002) defined CRM as "Customer Relationship Management (CRM) is a business strategy to select and manage customers to optimize long-term value. CRM requires a customer-centric business philosophy and culture to support effective marketing, sales, and

service processes. CRM applications enable effective Customer Relationship Management, provided that an enterprise has the right leadership, strategy, and culture."

2   NEED FOR THE STUDY

The forces of deregulation (liberalization), globalization and advancing technology have greatly increased the competitive pressures in the banking industry. The banking industry in India too is going through turbulent times. Since the financial reforms started, banks have been given a great degree of flexibility in determining their rate structure for deposits and advances, as well as their product range.

Further, the banking sector has undergone a sea-change from the time when the previous Customer Service Committees were appointed. There has been a huge proliferation of bank branches. Further, de-regulation has brought in its wake numerous banking services, niche products etc. Widespread use of technology also enhanced the customer expectations, specifically on the aspects of speed and quality of service delivery. In addition, technology implementation has made branch banking redundant on many aspects, redefined several of the existing services and raised customer expectations regarding reasonableness of service charges.

2.1   Objectives of the study

The main objective of the study is to explore various practices adopted by banks to maintain the customer relationship. The other objectives include:
- ❖ To explore the reasons for opening account with the bank / branch.
- ❖ To study the employee behaviour in SBH and ICICI bank.
- ❖ To examine the usage of Information Technology by SBH and ICIOCI bank.

3   DATA SOURCES AND METHODOLOGY

To study the customer perceptions, primary data collected from the bank customers through a well structured questionnaire. Primary data is supplemented by secondary sources of information available from records, brochures, annual reports and other publications wherever required.

3.1   Sample size & design

The present study covers the CRM practices of SBH and ICICI bank. The size of the customer sample is 400. Branches from Nalgonda, Mahabub Nagar and Twin Cities (Hyderabad and Secunderabad) are covered. Convenient sampling method is used.

3.2   Data Processing and Statistical tools

Appropriate care is taken to process the collected data. The collected data has been processed and analyzed by using various statistical tools. The data processed with the help of MS – Excel and SPSS software.

3.3   Scope of the Study

The scope of the present study geographically is limited to Nalgonda, Mahabub Nagar and twin cities of Hyderabad and Secunderabad. The period of study is from 2009 to 2012. State Bank of Hyderabad (Public Sector) and ICICI bank (private sector) were covered in the present study.

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Table 1: Respondents Profile (Gender) (Primary Data (Figures in the brackets indicates percentages))

Bank	Male	Female	Total
ICICI	171 (85.5)	29 (14.5)	200 (100)
SBH	133 (66.5)	67 (33.5)	200 (100)
Total	304 (76)	96 (24)	400 (100)

From the above table, there are 171 male customers of ICICI bank and 133 male customers of SBH. The sample also consists of 29 female customers of ICICI and 67 female customers of SBH. A total of 304 male customers and 96 female customers were studied in the present study. Respondents consist of different age groups and different professions.

Table 2: Respondents profile (Age wise) (Primary Data (Figures in the brackets indicates percentages))

(Age in years)

Bank	18-25	26-35	36-45	46-55	56 & above	Total
ICICI	19 (9.5)	148 (74)	25 (12.5)	4 (2)	4 (2)	200 (100)
SBH	55 (27.5)	84 (42)	36 (18)	12 (6)	13 (6.5)	200 (100)
Total	74 (18.5)	232 (58)	61 (15.25)	16 (4)	17 (4.25)	400 (100)

Table-2 presents the details of respondents on the basis of their age. There is clear distinction in the age group of customers of ICICI and SBH. Customers in the age group of 26 – 45 are choosing ICICI bank. Out of two hundred customers of ICICI there are one hundred and seventy three customers are in the age group of 26 – 45 years. In case of SBH, majority of the customers are in the age group of 18 – 45 years. The reasons for opening with bank may be due to near to residence, near to office or information technology advancement.

3.4   Educational Qualification of the customers
The customers classification based on their educational qualification is given below: the composition of ICICI bank customers on the basis of education qualification is three customers educated to the level of primary education; six customers have completed their high school education, one customer was educated till tertiary/intermediate level, sixty five customers did their graduation. One hundred and twenty one customers have completed their Post Graduation and four customers did their doctoral studies.

The educational qualifications of SBH customers are as follows: one customer has no formal schooling; nine customers have completed their primary education, three customers did their high school education; sixty customers have completed their graduation; one hundred and seventeen customers have done their post graduation, ten customers have completed / to be completed their doctoral studies. We can find the similarity in terms of educational qualifications of the customers of ICICI bank and SBH bank. (table 3)

Table 3: Educational Qualification

Bank	No schooling	Primary	High school	Tertiary	Graduate	PG	Ph. D	Total
ICICI	0 (0)	3 (1.5)	6 (3)	1 (.5)	65 (32.5)	121 (60.5)	4 (2)	200 (100)
SBH	1 (.5)	9 (4.5)	3 (1.5)	0 (0)	60 (30)	117 (58.5)	10 (5)	200 (100)
Total	1 (.25)	12 (3)	9 (2.25)	1 (.25)	125 (31.25)	238 (59.5)	14 (3.5)	400 (100)

4 REASONS FOR OPENING BANK ACCOUNT WITH THE BANK/BRANCH

4.1 Near to Residence

The role of distance (or location) has a long history in the marketing literature and has been examined across a wide range of contexts, including marketing-mix decisions (e.g., Howard 1957), retail structure (e.g., Cox, 1959); distribution channel design (e.g., Bucklin, 1966), and manufacturing investment (e.g., Alderson and Green, 1964; Greenhut, 1956). In general, this earlier literature focused on spatial distribution of buyers and sellers and physical distribution costs. More recent marketing studies examine the role of geographic proximity in inter-firm relations, finding that firms in close geographic proximity face lower costs (Cannon and Homburg, 2001), display a weaker competitor focus (McEvily and Zaheer, 1999), and draw on each other's knowledge base when developing new products (Rosenkopf and Almeida, 2001). Thus, the marketing literature has shown an enduring interest in geographic location; however, it has given relatively little attention to the role of location in inter-organizational new product development.

Residence is one of the important factors which influence the customers to choose the bank/branch. In general people/customers prefer the banks/branches which are well connected to transport facilities. Near to residence will result in comfort to customers to transact with bank. Time can be saved; cost of transportation can be avoided or reduced significantly. Several times customers used to postpone the bank activities if the location of the bank is far. Nowadays, banks are analysing the merits and demerits of locations by analysing the population and their financial status etc. banks are also designing their products according to the location of the bank/branch.

Table 4: Near to Residence (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	80	40	120	60	200
SBH	114	57	86	43	200
Total	194	48.5	206	51.5	400

From the above table, with regard to ICICI bank eighty respondents felt that they have opened their account with the bank due to the reason of near to residence. In case of SBH, one hundred and fourteen respondents opined that they have opened accounts because of nearness to residence. Overall, one hundred and ninety four respondents felt that the location of bank/branch made them to open the account. Customers can save time and feel convenient if the bank is located to their residence. The problems such as transportation can be avoided by

selecting the bank which is near to their residence. In the present study it is found that a significant number of customers have opened their accounts because of the reason of nearness to residence (table 4).

4.2   Near to Office

Majority of the customers considering the banks which are located near to their working place to open account. This is because it is easy to transact with the bank while coming to office or leaving the office or in between. In the present study, with regard to eighty nine customers responded that near to office is one of the reasons for opening their account with the bank. In case of SBH sixty customers said that they have opened their account being the bank located near to their working place/office (table 5).

Table 5: Near to Office

Bank	Yes	Percentage	No	Percentage	Total
ICICI	89	44.5	111	55.5	200
SBH	60	30	140	70	200
Total	149	37.25	251	62.75	400

4.3   Due to employer

One of the important factors which forcing the customers to open account with some particular bank/branch is due to the employer account. In majority cases, employer after appointing the employees opens account to each employee with the bank/branch with whom already they holds account. To avoid the problem of introducer signature etc. Employers making all arrangements to open the accounts. More particularly, private sector employers making it mandatory to open account with the specified bank/branch.

Table 6: Due to Employer (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	137	68.5	63	31.5	200
SBH	103	51.5	97	48.5	200
Total	240	60	160	40	400

While appointing employees majority organizations used to open the account with the employer's bank/branch. With regard to ICICI bank, One hundred and thirty seven respondents out of two hundred opined that due to employer account they have opened bank account with the bank/branch. Whereas in case of SBH bank one hundred and three customers responded that their employers made it mandate to open account with the bank/branch (table 6).

4.4   Timings

Timings of the banks are also one of the influencing factors while opening the bank account. Banks with extended working hours and banks which functions on Sundays are interested by customers. Convenient timings imply flexibility to the customers to transact with comfort. In the present study total of one hundred and six customers responded that convenient timings is one of the reasons to open the account with bank. Bank wise responses are as follows: sixty five customers of ICICI opined that because of convenient timings they have opened their

account. Forty one customers of SBH expressed that convenient timings of the bank have made them to open account with the bank (table 7)

Table 7: Convenient Timings (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	65	32.5	135	67.5	200
SBH	41	20.5	159	79.5	200
Total	106	26.5	294	73.5	400

4.5 Prompt service

In present situation prompt service is gaining importance. The customers are expecting faster and cheaper services and they are trying to establish relationships with those firms who are capable of delivering prompt service. Promptness implies service delivery as per promise and according to the agreed conditions. Promptness means simply delivering the goods / service to the right customer, at right time, right product, right price without compromising the quality (right quality).

The following table depicts the responses of customers with regard to prompt service. Eighty five customers of ICICI bank responded that the prompt service of the bank made them to open account; thirty seven customers of SBH opined that the prompt service offered by the banks is one of the reasons behind opening the account. A total of one hundred twenty two customers responded that prompt service of the bank made them to open account (table 8).

Table 8: Prompt Service (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	85	42.5	115	57.5	200
SBH	37	18.5	163	81.5	200
Total	122	30.5	278	69.5	400

4.6 Modern technology

Technology is the order of the day. The emergence of internet has paved way for drastic changes in the banking sector. Internet banking, mobile banking etc., payments of electronic bills, telephone bills, insurance premiums, commercial payments were made easy because of the technology.

Nowadays, customers are searching for the most convenient and easy way of doing transactions with bankers. To avoid delays in depositing money, making payments etc., they are using technology and making payments. The modern technology has not only saved time of customers but also increased the quality of service and ultimately increased customer satisfaction. To know the impact of technology, the respondents were asked whether technology made them to open their account with the bank/branch or not. The following table depicts responses of the respondents. Total of one hundred and eighteen respondents amongst which ninety three of ICICI and twenty five respondents of SBH opined that because of modern technology they have opened their accounts with that particular bank/branch (table 9).

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Table 9: Modern Technology (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	93	46.5	107	53.5	200
SBH	25	12.5	175	87.5	200
Total	118	29.5	282	70.5	400

4.7 Friends & relatives

To know the effect of word of mouth, the respondents were posed a question under the category of reasons for opening the account with the bank/branch. Several times, satisfied customers may refer their family members or friends to start an account with the same bank/branch. Another thing is, while opening a new account; the introducer's recommendation is mandate. In some cases, customers may be interested to open their accounts with the bank/branch where their friends or family members have the accounts. The responses are as follows (table 10)

Thirty eight respondents of ICICI opined that they have opened their accounts with that particular bank/branch because of their friends and family members. The same number thirty eight respondents opined that their friends and relatives are the reason behind opening the account with that particular bank/branch. With regard to the impact of friends and relatives, it is similar in case of both ICICI and SBH.

Table 10: Friends & Relatives (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	38	19	162	81	200
SBH	38	19	162	81	200
Total	76	19	324	81	400

4.8 Interest rates

It is quite understandable that customers prefer a bank where they can get more interest on their deposits and where they can avail loans or advances at lower interest rates. To know the influence of interest rates the respondents were asked a question on the interest rates.

A total of forty two respondents out of four hundred have opined that because of the attractive interest rates they have their account with the bank/branch. It is clear that only about ten percent of the respondents are looking for attractive interest rates. The bank wise responses are as follows: thirty respondents out of two hundred have said that the attractive interest rates made them to open account with ICICI bank, in case of SBH only twelve respondents expressed that because of attractive interest rates they have opened accounts with the bank/branch. Here we can draw the inference that the customers are not that much looking for monetary benefits rather they are looking for non monetary benefits like service quality, prompt service, modern technology etc. (table 11).

Table 11: Interest rates (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	30	15	170	85	200
SBH	12	6	188	94	200
Total	42	10.5	358	89.5	400

4.9 Insurance Coverage

Presently firms are planning to offer different products with variety of combinations and special privileges. The main intension is to create an impression in the minds of customers that they are superior in the offerings as well as quality. Insurance coverage is one of the privileges offered by the banks to their customers. The following table (Table 12) depicts the responses of customers.

Table 12: Insurance Coverage (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	31	15.5	169	84.5	200
SBH	7	3.5	193	96.5	200
Total	38	9.5	362	90.5	400

Thirty one customers of ICICI opined that the insurance coverage offered by the bank made them to open the account with the bank. Seven customers of SBH bank opined that the insurance coverage offered by the bank made them to open the account with the bank. A total of thirty eight customers responded that insurance coverage offered by the bank is the reason which made them to open account with the bank.

Table 13: Other Reasons (Primary Data)

Bank	Yes	Percentage	No	Percentage	Total
ICICI	0	0	200	100	200
SBH	30	15	170	85	200
Total	30	7.5	370	92.5	400

The list of reasons for opening the bank account is exhaustive. The above table (Table 13) presents the responses of customers regarding the other reasons. Thirty customers responded that they have opened their account with the bank due to other reasons. The prominent among the other reasons are Sunday working, students have opened their account with the bank which already their college has bank account. Bank timings are also the reasons behind opening the bank account.

4.10 Employee behaviour

"Happy employees are more productive" Sayulu and Showry (2012) in their research paper titled "Employee Productivity in Indian Banks" have examined employee productivity in public sector, private sector and foreign banks in India. Profitability and effectiveness of the banks has been attracting the attention of all stakeholders owing to intense competition, financial crisis and failure of few banks like Global Trust Bank and others in abroad. In addition to the popular measures related to finance, number of accounts, deposits, income,

assets, and branch network employee productivity can also be considered to contribute significantly to the effectiveness and productivity of the banks.

"If you treat your employees in right manner, they will treat your customer in the right manner". It is true that productivity of bank can be raised by enhancing the productivity of employee through better human resource practices that attract, recognize and reward productive employees. In this study it is found that the business per employee in public sector banks is more than private sector bank. Foreign banks are dominating in terms of business per employee. When it comes to net profit per employee, the net profit per employee in public sector bank is less than private sector bank. Foreign banks are dominating in terms of net profit per employee. The study has pointed out that there is significant difference between the public sector banks, private sector banks and foreign bank in respect of employee productivity.

Table 14: Employee Behaviour (Primary data (Figures in brackets indicates percentage))

Bank	Friendly	Normal	Rude	Total
ICICI	3 (1.5)	90 (45)	107 (53.5)	200 (100)
SBH	11 (5.5)	136 (68)	53 (26.5)	200 (100)
Total	14 (3.5)	226 (56.5)	160 (40)	400 (100)

The above table depicts the responses of customers regarding the behaviour of employees. (table 14) Overall fourteen customers expressed that the employee's behaviour is friendly; two hundred and twenty six customers opined that the bank employee's behaviour is normal. One hundred and sixty customers which counts for forty percent have expressed that the employee's behaviour is rude. Banks need to train their employees to mould their behaviour in friendly manner.

Chen and Popovich (2003) stated that re-engineering a customer-centric business model requires cultural change and the participation of all employees within the organization. This change may result in the change of roles of many employees. Business processes and organization structure adjusts the staff's behaviour. However, they cannot adjust all rules. If the employees have to succeed in changing these rules, then the banks' top management must create and make clear to employees the vision of the change together with clear rules, which the staff can accept and identify with. The success of CRM will depend mainly on a professional approach to work of all company employees, on their motivation, skills and knowledge, but also on systemic and consistent measurement and appraisal of their achievement.

4.11   Hypothesis Result

Null Hypothesis: there is no significant difference between ICICI bank and SBH bank with regard to employee's behaviour.

Alternative Hypothesis: there is significant difference between ICICI bank and SBH bank with regard to employee's behaviour.

Test employed: Chi – Square Test

Degrees of Freedom: 2

Table 14(a): Chi – Square Test (Primary Data)

Test tool	Degrees of Freedom	Asymp. Sig. (2 – sided)	Value
Pearson Chi – Square	2	.000	32.159

Chi square calculated value is 32.159, and table at 5% level of significance with 2 degrees of freedom is 5.991. Here, the calculated chi square value (32.159) is greater than the table value (5.991) hence, the null hypothesis is rejected. It can be concluded that there is significant difference between the ICICI bank and SBH bank with regard to employee's behaviour.

4.12 Information technology

CRM frequently employs IT technology as a means to attract, develop, and retain customers. For example, the application of IT technology allows for IT-based interactivity that makes it possible for customers to have access to product and service information much faster than earlier. It also permits businesses to leverage information from their customer databases to achieve customer retention, and to cross-sell new products and services to existing customers (Falque, 2000; Foss and Stone, 2001; Ghodeswar, 2000; Natarajan and Shekar, 2000). It must be emphasized, though, that CRM does not necessarily involve Information technology. "Customer Relationship Management is a comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer" (Parvatiyar and Sheth, 2000, p. 6).

Technology adoption has changed the face of banking in India. Wide spread technology deployment in the banking business has also brought to the fore some new issues and challenges. These can be broadly divided into two categories - costs and risks. Costs, in terms of increasing expenditure on IT deployment and risks that are resulting from reliance on IT systems without necessary safeguards. Cost aspects can be addressed by synergizing IT deployment objectives with the broader, strategic business objectives to ensure adequate operational and management controls over purchase as well as maintenance of appropriate technology solutions. The second aspect relating to IT risks is a very critical issue. With the increased use of IT, there are attendant risks posed to the banks as well as their customers in terms of monetary loss, data theft, breach of privacy and banks need to be extremely cognizant of such risks. Another significant aspect of banking business is regulatory and supervisory compliance. With the growth and globalisation of markets in general and in the aftermath of recent crisis in particular, number of such compliance requirements is increasing. Basel II and III implementation brings in huge challenges. Banks have adopted technology, but the benefit of technology has not fully percolated in terms of cost, speed and convenience. Empowering customers with technology-driven benefits is a big challenge.

Table 15: Information Technology Usage by the bank (Primary Data)

Bank	Response	No. of Respondents	Percentage
ICICI	Excellent	0	.25
	Good	1	4.25
	Average	33	17.75
	Poor	127	23.5
	Very Poor	39	4.25
SBH	Excellent	2	1.25
	Good	5	7
	Average	74	13.5
	Poor	102	18.5
	Very Poor	17	9.75
Total		400	100

Information technology(IT) has long being recognized as an enabler to radically redesign business processes order to achieve dramatic improvements in organizational performance (Davenport and Short, 1990) is of the view that CRM software solution is only a "TOOL" for procedures already in place. IT assists with the redesigning of a business process by facilitating changes to work practices and establishing innovative methods to link a company with customers, suppliers and the entire stakeholders (Hammer and Champy, 1993). CRM applications take full advantage of technology innovations with the ability to collect and analyse data on customer patterns, interpret customer behaviour, develop predictive models, and respond with timely and effective customized communications and deliver product and service value to individual customers. CRM solutions deliver depositories of customer data of a fraction of the cost of older network technologies.

The above table (table 15) presents the responses of the customers of ICICI bank. One customer responded that the Information Technology is good; thirty three customers opined that the Information Technology of the bank is average. One hundred and twenty seven customers expressed that the IT is poor and thirty nine customers opined that the IT used by the bank is very poor. SBH customers responded as follows: two customers responded that the IT used by the bank is excellent; five customers opined that the IT used by the bank is good. Seventy four customers responded that the IT of bank is average. One hundred and two customers responded that the IT used by the bank is poor and seventeen customers expressed that the information technology used by the bank is very poor.

4.13 Hypothesis result
Null Hypothesis: there is no significant difference between ICICI bank and SBH bank with regard to use of Information Technology.
Alternative Hypothesis: there is significant difference between ICICI bank and SBH bank with regard to use of Information Technology.
Test employed: Chi – Square Test
Degrees of Freedom: 4

Table 15(a): Chi – Square Test (Primary Data)

Test tool	Degrees of Freedom	Asymp. Sig. (2 – sided)	Value
Pearson Chi – Square	4	.000	31.749

Chi square calculated value is 31.749, and table at 5% level of significance with 4 degrees of freedom is 9.49. Here, the calculated chi square value (31.749) is greater than the table value (9.49) hence, the null hypothesis is rejected. It can be concluded that there is significant difference between the ICICI bank and SBH bank with regard to Information technology deployment.

5   CONCLUSION

It is clear that the banks are striving hard to satisfy their customers. Innovative services like net banking, mobile banking, online payments etc. are able to satisfy the customers to a greater extent. Banks have to understand the importance of physical facilities such as seating facility, parking facility, cleanliness etc. globalization is the order of the day banks are not exception to this. Banks need to gear up themselves to face the new entrants from abroad.

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FACTORS AND MODELS OF ACADEMIC SUCCESS OF DOUBLE DEGREE PROGRAMME IN ECONOMICS

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ABSTRACT

The problem to be discussed – finding the key groups of academic success factors, setting proper indicators for them, investigating quantitatively and qualitatively their influence on programme success and to manage them when possible. The key factors considered – students' admission, grouping, teachers' appointments, students' assignments, workload and knowledge evaluation, motivation, individual students' characteristics. The indicators to reflect the academic outcome - average grades and standard deviations, progression rates, shares of pass or excellent grades, starting from admission to the graduation and placement. Modeling of the relationships between exogenous and endogenous factors and indicators allows to undertake proper managing policy measures. Since 2009 admission to Russian universities is done on the basis of scores of Unified State Exams (USE) in Mathematics, English and Russian languages. Every year econometric analysis of the USE scores as factor of further success is done at ICEF. It shows that the USE sum is reasonable indicator of success, and all three scores have individually significant, though gradually decreasing, influence on further success at the programme. The analysis allows to give recommendations on the admission criteria in further years. After the year 1 ICEF students are admitted to the UoL International programme on the basis of Advanced Placement tests (APTs). The following factors are considered in econometric models for APT results: grouping of the students, lecturers' and classteachers' appointments, external factors (worldwide grades dynamics), personal students' indicators, entrance qualifications and the progress during the year. The progression of the years 2-4 students on double degree programme depends both on International (University of London) exams and local exams and other activities. Factor analysis of final success in each subject is regularly done using econometric methods. It allows to improve the programme, teaching and the students' motivation. The regression analysis showed that only stronger students staying in stronger groups win from the regrouping, while all the other students loss in terms of peer effect, and such a regrouping reduces the progression rate. There are few indicators used for the teachers' performance at the ICEF: the grades at the international exams, students' evaluations, and peer reviews. The average scores, standard deviations, pass rates and excellent grades' shares are analysed after receiving the exams grades. Dummy variables for particular classteachers are used in the models of student achievement, and those who do significantly worse (though this happens rather seldom) get additional training. This analysis allowed to develop the teachers' appointments policies at ICEF. Another set of indicators of teachers' performance comes from the students' evaluations of teacher's clarity, logic, feedback, control, availability. Again, econometric analysis shows that the "clarity" indicator is the most important for the students' overall teaching evaluation. Students' evaluations should be taken into account

together with the course results and peer review reports. An intensive programme for new teachers' induction is implemented at ICEF, taking into account the factors from evaluations. Modeling of the factors of academic success allows to develop the policy of admission, teachers' appointment and support, the students' grouping, motivation and workload distribution. This approach is planned to be extended in ICEF to the analysis of developments and evaluation of all kinds of knowledge and skills requested by the employers, to the wider range of subjects, indicators and activities.

Keywords: *Academic Success, Econometric Analysis, Education, Factor, Model, Policy Measures*

1 INTRODUCTION

Achievement of high academic results is the key objective for a university. There are different factors of achieving this objective – on the sides of students, teachers and the institution. The problem to be discussed in the paper – investigation of how to formulate the key groups of academic success factors, to set proper indicators for them, investigate quantitatively and qualitatively their influence on programme success, and hence to manage these factors when possible.

The key factors considered – students' admission, grouping, teachers' appointments, students' assignments, workload and knowledge evaluation, motivation stimulation, individual students' characteristics. The indicators to reflect the academic outcome - average grades and standard deviations, progression rates, shares of pass or excellent grades for different students' groups and subgroups, at different stages of studies, starting from admission to the graduation and placement. Modeling of the relationships between exogenous and endogenous factors and indicators allows to undertake proper managing policy measures. The double degree BSc programme at the International College of Economics and Finance (National Research University Higher School of Economics, Moscow, created and implemented in cooperation with the London School of Economics) is organized in such a way that provides sufficient data on students' academic success that allows serious statistical and econometric analysis of the factors of academic achievement. The students get BSc Degree in Economics of NRU HSE and the BSc degree of the University of London, and hence have regular and detailed knowledge control by both universities. ICEF also has MSc programme in Financial Economics also developed in cooperation with the LSE, and investigation of its academic success factors is also very important though being outside the scope of this paper.

2 ADMISSION

Since 2009 admission to Russian universities is done on the basis of scores of Unified State Exams (USE) in Mathematics, English and Russian languages. Every year careful econometric analysis of the USE scores as factor of further success is done at ICEF. It shows that the sum of three USE scores is reasonable indicator of success, and all three scores have individually significant, though gradually decreasing, influence on further success at the programme. Those candidates who have the sum of three USEs scores 205 or more were admitted in 2011–2012, and various econometric models were estimated on the basis of admission criteria, further students' efforts and individual characteristics. The analysis allows to give particular recommendation of the admission criteria raise in further years. The fee discounts on the year 1 are given on the basis of weighted sum of USE scores, with the weights corresponding to the average contribution of each USE in final rating estimated using

regression model (3 for Math, 2 for English, 1 for Russian). Modeling of the academic success also allows to give further recommendations for fee discounts policy.

3 ACADEMIC SUCCESS DURING THE STUDIES

After the year 1 ICEF students are admitted to the UoL International programme on the basis of Advanced Placement tests (APT) in Calculus, Statistics, Microeconomics, Macroeconomics. To prepare the students to these exams, local exams in the same format are set three times during the year. Local grades serve as a good indicator for further APT success: normally the correlation of 0.7-0.8 is observed which is rather high. The average scores and the pass rates in each AP exam are analysed in dynamics, and the following factors are considered basing on econometric models: grouping of the students, lecturers' and classteachers' appointments, external factors (worldwide grades dynamics), personal students' indicators, entrance qualifications and the progress during the year. The results of analysis are used for programme developments. For example, in 2012 the Microeconomics was found being the bottleneck for further progression (together with Macroeconomics), and these courses were extended in time and in content.

The regression of the AP_AVE (the average of 4 APT scores, out of 5) in 2012 on three USE scores (USE_M, USE_R and USE_E for Mathematics, Russian and English languages), as well as gender dummy (MALE), being high school Olympiad winner (OLYMP), end being from non-Moscow region (REGIONS) is given below:

Dependent Variable: AP_AVE
Method: Least Squares
Included observations: 176

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.471	0.967	-5.656	0.000
USE_M	0.050	0.008	6.471	0.000
USE_R	0.026	0.009	3.104	0.002
USE_E	0.032	0.010	3.110	0.002
MALE	0.309	0.149	2.076	0.040
OLYMP	0.436	0.212	2.060	0.041
REGIONS	-0.071	0.169	-0.421	0.674

R-squared	0.405	Mean dependent var	3.543
S.E. of regression	0.926	S.D. dependent var	1.180
Sum squared resid	144.8	F-statistic	19.19
Durbin-Watson stat	2.221	Prob(F-statistic)	0.000

It can be seen from the regression that all USE grades are significant indicators for further student's success, both as a group and individually, and even the contributions of the grades in the overall APT mean score are approximately proportional to their weights for the indicator of fee discount. It is important that the High school olympiads' winners (who are likely the people most interested in the Economics subject area) perform significantly better than other students (with other factors fixed), male students doing slightly better than female (this should be confirmed by other models and years in order to judge, though in principle some motivations difference is possible due to different army service responsibilities in case

of failure in studies), and popular opinion that the students from the regions other than Moscow can perform differently from the Moscovites is not correct.

At the same time, the overall explanatory power of the regressors is not too high (judging by the Determination coefficient 0.4), and the effectiveness of the personal student's effort throughout the year of study at ICEF (based on his/her abilities, motivation, and the quality of teaching) is very important. Adding to the regression above the average mid-term exams grades (4 ICEF exams in April, in the same subjects as APTs, out of 100) as an additional regressor allows to raise the R^2 value from 0.4 to 0.75 immediately, and "absorbs" the explanatory power of Mathematics and Russian USE exams, as well as of OLYMP (but not MALE) variable.

While the average score shows the overall group's level and its factors, the progression rate (here the University of London admission rate) is also very important for investigation and analysis. The student is admitted to the University of London in terms of APT results (qualification in English is also needed) if he/she has passed (got 3 or more out of 5) 2 subjects out of 3 (Calculus, Statistics, Economics). To pass Economics means to pass both Micro- and Macroeconomics. In 2012, the UoL admission rate for ICEF students was about 76%, and the binary variable UL_PASS indicates if the student was admitted. Here below the results of Logit model estimation are presented, and in terms of the variables significance they are similar to those of the model for the AP_AVE variable factors. Even the order and ratios of the USE exams contributions are similar: the Mathematics exam has the highest coefficient, then English and Russian languages. Though MALE variable becomes insignificant here, as one could expect.

Dependent Variable: UL_PASS
Method: ML - Binary Logit (Quadratic hill climbing)
Included observations: 174

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-20.206	3.615	-5.590	0.000
EGE_M	0.111	0.029	3.859	0.000
EGE_R	0.057	0.028	2.084	0.037
EGE_E	0.093	0.031	3.030	0.002
MALE	0.636	0.470	1.352	0.176
OLYMP	1.875	0.984	1.905	0.057
REGIONS	-0.010	0.530	-0.188	0.851

Mean dependent var	0.753	S.D. dependent var	0.433
S.E. of regression	0.358	McFadden R-squared	0.308
Sum squared resid	21.41	LR statistic (6 df)	59.92
Log likelihood	-67.33	Probability(LR stat)	0.000

The estimation shows that in order to provide higher than 50% progression rate to the year 1, the admission criteria should be set at about the level of 235 points, which means about 10 points more on average in each exam on average (out of 100) than now.

The progression of the years 2-4 students on double degree programme depends both on International (University of London) exams and local exams and other activities. Factor analysis of final success in each subject is regularly done using econometric methods. Current activities and motivation to study become more significant each further year of studies, and local performance is again very good indicator of the UoL exams grades: normally the R^2 coefficient of regressions is 0.7-0.8. Lectures attendance or home assignments grades are usually significant for the forthcoming exams grades while if this grade is included as a factor for further success, it normally crowds out the influence of those indicators.

Here is an example of regression of final exam in Econometrics (FINAL) on the rating (average grade) for the previous year (RATING), lectures attendance (LECT), home assignments average grade (HA_AVE), and the mid-term exam result (MIDTERM); all variables out of 100 (the lecture attendance in %).

Dependent Variable: FINAL
Included observations: 85

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-19.67	6.319	-3.113	0.0026
MIDTERM	0.191	0.082	2.320	0.0229
LECT	0.057	0.024	2.172	0.0328
HA_AVE	0.273	0.089	3.058	0.0030
RATING	0.660	0.174	3.801	0.0003

R-squared	0.755	Mean dependent var		49.67
S.E. of regression	9.478	S.D. dependent var		18.67
Sum squared resid	7185.9	F-statistic		61.53
Durbin-Watson stat	2.25	Prob(F-statistic)		0.0000

All the variables are here significant, and the coefficients allow to estimate the average influence of each factor on the final exam grade. This type of analysis allows to adjust the teaching and knowledge control methods, also to improve the students' motivation in terms of informing them on the factors of success. Unlikely many other students, ICEF students usually study intensively throughout all academic year. By now, ICEF students presenting about 2.5% of the UoL EMFSS students, usually get 15-20% of awards for best academic achievement, 10-15 top scores out of 19 exams taken, and have average grade of about 60 (second upper class level) against 40-42 overall UoL average.

4 GROUPING

Basing on the data on academic success after the students' regrouping on the basis of previous achievement, the regression analysis was done. It showed that only stronger students staying in stronger groups win from the regrouping, while all the other students loss in terms of peer effect, and such a regrouping definitely reduces the progression rate. In 2013 such a regrouping has not been done in accordance with recommendations, and an investigation of different approaches for initial grouping (from completely random to some "soft" streaming in accordance with their level/motivation are at further investigation. Some key results of regrouping analysis done are available below.

Enterprise in Turbulent Environment

In August groups are formed on the basis of Unified State Exam (USE) in Mathematics. In 2011-2012 year ICEF had two types of groups: "stronger" and "weaker": top 40% of students were distributed among 4 groups quasi-randomly, other 60% of students were distributed among 6 groups also quasi-randomly.

In January 2012, after December exams, the groups were re-distributed on the basis of ICEF AP subjects exams rating (Calculus, Microeconomics, Statistics). Each group kept its "core", but some student were "upgraded" to the "stronger" groups, some were "downgraded" to "weaker" (24 and 32 respectively), and some with the lowest results left the programme. Finally all who took the rating in top 40% after winter exams were in "stronger" groups, and next 60% in the weaker.

The analysis of regrouping efficiency was done on the basis of April ICEF exams. Here RAT_APR shows the students' April average scores in the 4 AP subjects, CALC_APR, STAT_APR, MIC_APR and MAC_APR are their scores (out of 100) at the April mid-term exams in Calculus, Statistics, Microeconomics and Macroeconomics respectively. The explanatory variables (ended by _JAN, no Macroeconomics since it was taught in semester 2 only; HIST means History elective) are the scores at the final semester 1 exams after which the students were regrouped. Dummy variables WE_WE, WE_ST, ST_WE and ST_ST mean the initial and final group type for each student: for example, WE_ST equals one for those moved from the weaker to stronger group, while WE_WE equals one for those who stayed in their weaker group. Those who stayed in the stronger group are the reference category.

Dependent Variable: RAT_APR
Included observations: 182

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.303	3.560	0.366	0.7148
STAT_JAN	0.187	0.070	2.674	0.0082
CALC_JAN	0.229	0.059	3.901	0.0001
MIC_JAN	0.353	0.065	5.458	0.0000
WE_WE	-3.088	1.858	-1.662	0.0983
WE_ST	-4.628	1.733	-2.671	0.0083
ST_WE	-3.793	1.915	-1.981	0.0492
HIST_JAN	0.082	0.030	2.758	0.0064

R-squared	0.809		Mean dependent var	38.89
S.E. of regression	6.725		S.D. dependent var	15.04
F-statistic	104.5		Durbin-Watson stat	2.087

In the regression for overall rating all three categories of students got in April significantly (at least at 10% level) less than the reference category (if other factors are equal). This means that only those stronger students who stayed in their initial stronger groups won comparing to the others. As for the particular subjects, the most significant results in line with the overall ones were observed for Calculus (see below) which is based on Mathematics being the basis for initial grouping:

Dependent Variable: CALC_APR
Included observations: 199

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.680	5.000	1.136	0.257
STAT_JAN	0.167	0.095	1.760	0.080
CALC_JAN	0.474	0.082	5.784	0.000
MIC_JAN	0.297	0.087	3.394	0.001
WE_WE	-9.008	2.606	-3.457	0.001
WE_ST	-7.430	2.472	-3.005	0.003
ST_WE	-6.344	2.738	-2.317	0.022

R-squared	0.759	Mean dependent var	41.82
S.E. of regression	9.811	S.D. dependent var	19.69
F-statistic	100.9	Durbin-Watson stat	1.961

According to statistical analysis, regrouping of the students according to rating positively influenced the performance of the students that stayed in the stronger groups. This category of students is taken as reference category, and its dummy is called ST_ST. Regressions estimated with AP main courses grades as dependent variable gives us the same positive influence on strong students' performance.

Students who moved from stronger groups to weaker ones according to their academic performance, do not benefit from the movement. Their overall results decreased by 3.7 points, calculus results decreased even more, by 7 points. It can be assumed that strong students play the role of locomotive in weaker groups, so weaker students are more motivated to study and get additional peer support.

The students who moved from weaker groups to stronger ones have also demonstrated worse performance than the reference group. This result can be explained by the fact that in weaker groups such students were leaders that stimulated them to learn more, in particular in active interaction with the classteachers, as well as with their peers. In stronger groups these people are of the medium level and this fact discourages them.

The largest decrease in academic performance show the weaker students who stayed in weaker groups: the estimated decrease in calculus goes over 9%. The explanation of this fact is that after the movement stronger students are gone to stronger groups and in weaker ones only weaker students stay. Weaker environment makes weaker students even less motivated. They also do not get some peer support from the stronger students who left the group.

So, generally, the regrouping of students does not influence positively the academic performance, and it was not done in 2013 due to this.

5   TEACHERS
There are few indicators used for the teachers' performance at the ICEF double degree programme. First, these are the students' grades at the external (international) exams. Since the exams are external and properly set at the stable level, the grades' changes are not large and happen mostly due to the teachers' work and the students' motivation and effort. The

average scores, standard deviations, pass rates and excellent grades' shares are analysed after receiving the external exams grades, also compared with the dynamics of the "other world" grades. The absolute changes corrected by the overall changes may be the "exam performance" indicators for teachers' and students' achievement. For example, if in 2011 the Elements of Econometrics ICEF students' average score went up by 7%, and the "other world" average went down by 6%, then hence the "corrected" increase was about 13%, - and this is the indicator to be regressed on other factors.

Dummy variables for particular classteachers are used in the models of student achievement, and those who do significantly worse (though this happens rather seldom) get additional support, or may be even replaced by more efficient colleagues. This analysis allowed to develop the teachers' appointments policies at ICEF.

6   STUDENT EVALUATIONS

Another set of indicators of teachers' performance comes from the students' evaluations, - different features of teaching are evaluated in 1-5 scale: clarity, logic, feedback, control, availability. Again, econometric analysis shows that the "clarity" indicator is the most important for the students' overall teaching evaluation. Students' evaluations are important but should be taken carefully: usually the students evaluate lower the teachers of more advanced courses, classes are evaluated higher than lectures, and electives higher than mandatory courses – irrespectively to the actual quality of teaching. But they should be taken into account together with the course results and peer review reports done by the experienced teachers and teaching methods specialists on a regular basis. Since 2011, the intensive programme for new teachers' induction was implemented at ICEF, and the programme of teaching quality assurance (in co-operation with the LSE Teaching and Learning Center) was developed. Statistical analysis of the students' evaluations showed that the new teachers in 2011-2012 got significantly higher evaluations than before, and even higher than most of more experienced teachers. Also, ICEF graduates coming further to teach have significantly higher evaluations (other factors equal) than the others. This is due to the availability of many talented students in ICEF, good preparation for further academic or professional activity, good further education (mostly at the Western Master programmes), and also understanding of the programme requirements and students expectations.

The result of regressing Clarity evaluation (out of 5) on a number of factors is shown below. The variables shown to be significant (at 5% level) are LECT=1 for lecturers, CLARITY_SD – standard deviation of clarity – supposed to be higher for more advanced and complicated courses taught on the final year of the programme, GRAD=1 for ICEF graduates teaching at the programme, BEGIN – teaching for the first year at ICEF. The variables FTA =1 for full time academics with PhD degree, MSC=1 for master students teaching BSc class, UoL=1 for the University of London courses, YEAR2-4 dummies for the years of ICEF programme, NATIVE=1 for English native speakers, and ELECTIVE=1 for elective courses shown to be insignificant. Again, the students evaluate lower more advanced courses and activities, not just because of lower teaching quality, but essentially due to their own lack of understanding, and this should be taken into account when judging about the teachers' performance.

Dependent Variable: CLARITY
Method: Least Squares
Included observations: 117

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.556	0.147	37.74	0.000
FTA	-0.207	0.139	-1.492	0.139
LECT	-0.166	0.077	-2.163	0.033
MSC	-0.045	0.120	-0.373	0.710
UOL	-0.192	0.098	-1.957	0.053
GRAD	0.228	0.096	2.380	0.019
CLARITY_SD	-1.462	0.140	-10.44	0.000
BEGIN	-0.347	0.110	-3.171	0.002
YEAR2	0.038	0.108	0.352	0.725
YEAR3	0.039	0.122	0.319	0.750
YEAR4	0.006	0.131	0.043	0.966
NATIVE	0.087	0.099	0.872	0.385
ELECTIVE	0.019	0.102	0.190	0.850

R-squared		0.670	Mean dependent var	4.064
S.E. of regression		0.332	S.D. dependent var	0.547
Sum squared resid		11.436	F-statistic	17.62
Durbin-Watson stat		1.1629	Prob(F-statistic)	0.000

Modeling of the factors of academic success allows to develop the policy of admission, teachers' appointment and support, the students' grouping, motivation and workload distribution. This approach is planned to be extended in ICEF to the analysis of developments and evaluation of all kinds of knowledge and skills requested by the employers, to the wider range of subjects, indicators and activities (including the research type activities), and to the analysis of academic success factors at the MSc programme in Financial Economics where not just the grades but research quality is among the key academic results.

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ROLE AND POSITIONS OF LEADING COMPANIES ON INDUSTRIAL MARKETS: EVIDENCE FROM RUSSIAN ECONOMY[1]

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ABSTRACT

Paper deals with the analysis of role and positions of leading corporations. Basic approach of industrial economics is used as the starting point of analysis. Special indicators of companies' leading positions are suggested. Empirical part is based on data provided by national rating agency Expert Ra. The main aim is to analyze the positions of Russian largest corporations, to determine the character and dynamic characteristics of their leadership. Long term period from 2000 to 2011was studied. National and regional markets were compared.

Keywords: Leading corporations, Market power, Stability and sustainability of leadership

JEL Codes: G20, L10

1 INTRODUCTION

The processes of real industrial markets emergence and formation occur in Russian economy during last 20 years. Level of economic activity of large enterprises and level of dominance (market power) of one or several firms are among important market indicators. Current structure of many markets in Russian and market structure in general is related to the activities of few large companies. Leading position provides market power for a company. It is important to determine whether there are such market leaders and of so – how stable is their leading position.

An approach to the analysis of company's leading position is suggested in the paper. Under this approach we analyze "sustainability" and "stability" of leading position and therefore market power on the industrial market.

2 GENERAL CHARACTERISTICS OF MARKET LEADERSHIP

Large corporations play important role in the economy of any country. They make significant contribution to the formation of main economic indicators, they get key market positions, and their performance has great influence to the development of national economy. These companies have extended investment potential. Historical background and contemporary integration processes form very specific conditions in Russia. Under such environment the role of leading companies is especially important. Our estimations show that in 2007 total turnover of 20 largest companies was equal to 37% of GDP; similar indicator for 10 companies was equal to 28%. In 2010 after crisis these figures increased and were about 38% and 30% accordingly. Figure 1 shows the share of 1, 3, 5, 20 and 50 largest companies in

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total turnover of 400 national leaders – conditional concentration ratios CR_1, CR_3, CR_5, CR_{20}, CR_{50}.
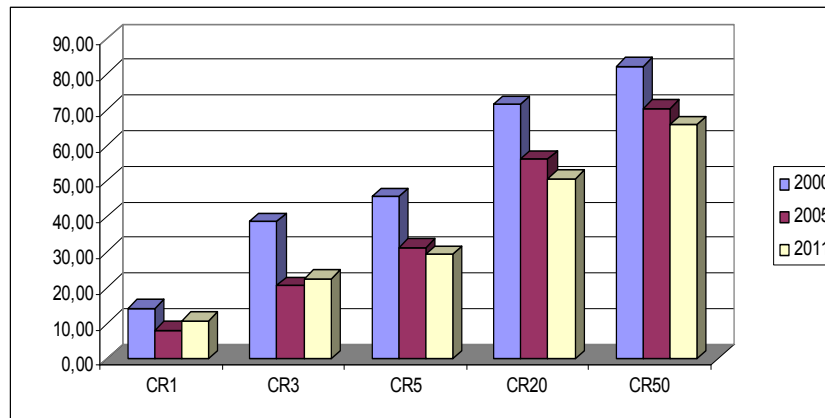

Chart 1: Concentration of the set of 400 Russian corporations which are leaders in turnover, % (estimated basing on the data provided by ExpertRa agency)

Results show that in general large companies are very different. In 2011 first 20 companies (from 400) formed about 50% of all turnover. It is possible to note basing on the figure 1 that most markets are characterized by the existence of definite leaders. Is should be mentioned that shares of 5, 20 and 50 leaders decreased during period from 2000 till 2011. CR_1 and CR_3 coefficients increased but these coefficients are influenced by many non market reasons.

The broad descriptive model of industrial markets development was conceived by Edward Mason and developed by Joe Bain. It is well known as The Structure – Conduct – Performance Paradigm (Scherer and Ross, 1991). Any industrial market structure is described with several basic structural indicators. Level of economic activity of large enterprises and level of dominance (market power) of one or several firms are among such indicators. Concentration is one of the main characteristics of market structure, it reflects the number of firms on the market and it shows how much they differ from each other. Concentration is related to the level of competition, to the market power of selected firms. It is known from the economic theory that level of concentration should be rather low for competitive markets. At the same time competition led to the companies' consolidation and increase of concentration (Perloff and Carlton, 2004).

Limited number of large companies concentrates main part of economic activities in most countries. N. Collins and L. Preston analyzed changes in the lists of American leading corporations since the beginning of the 20-th century (Collins and Preston, 1961). They found that this list is not stable; changes were explained by many factors. Demand plays the most important role. The list of US market leaders became more stable at the middle of 20-th century due to following reasons:
-   Positions of large firms became stronger;
-   Rate of demand changes decreased;
-   Management turned to be more professional;
-   Economic activities got diversified character.

Current structure of many markets in Russian and market structure in general is related to the activities of few large companies. Leading position provides market power for a company. It

is important to determine whether there are such market leaders and of so – how stable is their leading position.

An approach to the analysis of company's leading position is suggested in the paper. Under this approach we analyze "sustainability" and "stability" of leading position and therefore market power on the industrial market. The set of leading firms could be created on the basis of different criteria. It is possible to form a group of top (10, 20 etc) firms – leaders on sales, a group of leaders according to the level of profit, cost of assets, value added etc. Many groups of leaders could be defined on each market. These sets may include the same or different firms. According to our definition "sustainability" of leading position of the company means that this company is included to the set of leaders more than one time, i.e. is included in more than one group. If leading position is sustainable it is based on various criteria. If leadership is unsustainable, groups of leaders are very different; if leadership is sustainable, they are similar.

"Stability" of firm's leading position in our approach means that it remains in the group of tops during several (more than one) years, it reflects long term leadership.

Summing up definitions described above we could formulate that leading position of the firm is sustainable and stable if this position is based on various criteria in long term period. If such firms could be found at the definite market, leadership at this market is sustainable (or stable) and it would be possible to make forecasts on market's further development and main tendencies.

We suggest special calculable indicator – sustainability (stability) coefficient (CS).

$$CS = 1 - \frac{Nfact - N\min}{N\max - N\min}$$

Where: N fact – real number of leading firms included in all sets;
N min – minimal possible number of leading firms included in all sets;
N max - maximum possible number of leading firms included in all sets;

It should be noted that coefficient characterizes market situation in general, it is relevant to the whole market.

These coefficients vary from 0 to 1. If coefficient is equal to 0 it means that leadership is unsustainable (unstable). If it is equal to1 it means that leadership is absolutely sustainable (or stable).

The main aim of our paper is to analyze the positions of Russian largest corporations, to determine the character of their leadership. We studied the dynamics of these indicators during long term period, compared national and regional markets.

Basing on the assumption of classical Industrial Economics we looked at the stability and sustainability of groups of Russian leading companies. Empirical basis was presented by annual rating Expert 400, provided by ExpertRa agency. We've chosen following years: 1995, 2000, 2005, 2008, 2009, 2010, 2011. This time interval includes periods of economic stability as well as unstable ones.

Groups of companies with the highest levels of turnover, gross profit and level of capitalization were formed for each year. Then the compositions of these three groups were compared. We use the assumption that if company is leading on the market according to several criteria its position is sustainable. The existence of such companies shows that market structure is formed; tendencies of its development could be forecasted, basing on the performance of leading companies. If groups of leading companies don't intersect leadership on the market is unsustainable, market structure is uncertain (Yusupova, 2009).

3   LEADERSHIP OF RUSSIAN AND SIBERIAN CORPORATIONS

We took sets consisting of 20 and 5 leading firms. The stability of leadership was estimated by comparison of leading sets formed for different years. Leaders were determined according to turnover. Analysis was applied for national economy and for Siberian region. Results are presented on charts 2 and 3.
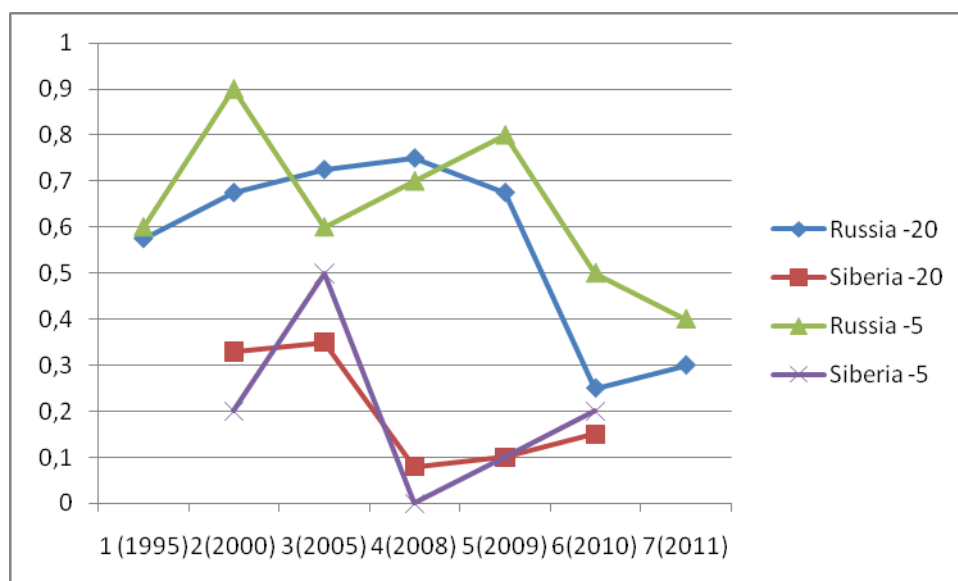

Chart 2: Sustainability coefficients (SC) for Russian and Siberian leaders

Results show that in general in Russian sustainability of leadership was rather high till 2008. This means that the same firms were leading according to different criteria. This situation indicates that market structure was rather mature, level of competition under such structure could not be high, and competition is far from perfect. Large corporations have high market power. This is relevant for sets of 20 leaders as well as for 5 leaders' sets. Sustainability of 5 leaders was slightly lower than of 20, except data for 2000 year. We consider that this could be explained by noneconomic factors.

Coefficient of leadership sustainability in 2009 decreased for 20 firms and increased for 5, in 2010 all coefficients decreased greatly. Such dynamics could be explained by reaction to general instability under crisis and post crisis environment. It became difficult for companies to keep leading positions in all directions. Following economy revival caused new increase of coefficients in 2011. It should be noted that some corporations are actually affiliated with each other (for example Gasprom and Gaspromneft). Formally they are separate entities, their results are registered separately. Therefore real sustainability of leadership should be higher than estimated.

Siberian companies show another picture. Sustainability coefficients of leadership in general are lower than national ones. This is observed h for 5 leaders and for 20 leaders. So positions of regional leaders are weaker, more competitive structures are developed in regions.

Reaction to crisis revealed sooner in regions. Already in 2008 SC for 20 leaders decreased greatly, SC for 5 leaders even was equal to 0. Growth of indicators was observed already in 2010, which also reflects more quick reaction to general changes than within national markets.

Dynamic of national and regional coefficients was different at national and regional level. In some years they even demonstrated opposite movement. Differentiation between national and regional markets is more definite for 5 leaders. We could propose the existence of regional specifics and regional autonomy.
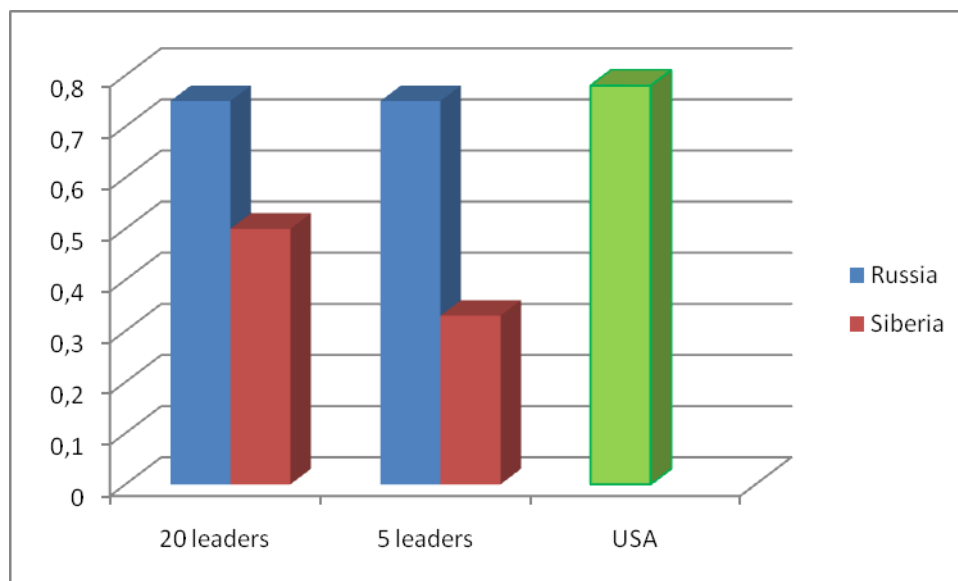

Chart 3: Stability coefficients

Stability of leadership during long term period is reflected on chart 3. These data are less relevant to crisis influence. In general stability indicators are rather high. We calculated similar coefficient using data from N. Collins and L. Preston's study for the US. American was higher (0,78) than Russian indicator (0,75). We consider that Russian indicator would be even higher without state interference (case of Ukos company).

Stability of Siberian leaders was lower comparing with national level.

Tables 1 and 2 show some characteristics of leading corporations. As we can see most of them operate in strategic areas of economy such as oil and gas sector. Level of competition at these markets is not high. In 2005 9 out of 20 leading companies worked at oil and gas sector, in 2011 8 leaders belonged to this sector. In general most of the leading corporations work in fuel energy complex. Besides list of leaders includes well known national monopolists such as Russian Rail Ways and Sberbank.

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Table 1: Industrial Characteristics of 20 Russian leading corporations (number of firms within each industry)

2005 year	2011 year
Oil and gas - 9 Banks– 1 Non ferrous metallurgy – 1 Telecommunications and communications – 3 Electrical power engineering– 1 Ferrous metallurgy – 4 Food industry - 1	Oil and gas - 8 Banks – 2 Non ferrous metallurgy – 2 Chemical and petrochemical industry – 1 Telecommunications and communications – 2 Electrical power engineering – 2 Ferrous metallurgy – 2 Precious metals and diamonds industry - 1

Industrial specifics reflected the levels of calculated indicators of stability and sustainability of leadership. List of Siberian leaders includes companies which belong to national giants. They conduct regional expansion tending to widen areas of influence.

Table 2: Industrial Characteristics of 20 Siberian leading corporations (number of firms within each industry)

2005 year	2010 year
Oil and gas - 2 Non ferrous metallurgy – 3 Telecommunications and communications, IT – 1 Electrical power engineering – 3 Ferrous metallurgy – 3 Transport – 2 Coal and turf industry - 6	Oil and gas - 2 Non ferrous metallurgy – 2 Telecommunications and communications, IT – 1 Electrical power engineering – 4 Ferrous metallurgy – 1 Transport and logistics – 2 Coal and turf industry - 3 Trade - 2 Banks -1 Manufacturing– 1 Precious metals industry - 1

Siberian leaders also belong to strategic areas, but fewer firms operate in gas and oil industry. As we showed earlier levels of leadership stability and sustainability are also lower for Siberian companies.

4 CONCLUDING REMARKS

Our research is going on. The existence of clearly defined leaders is important characteristic of any market. Positions of leading corporations, their role and market power is one of significant factors of market structure. Our research is based on data of Russian rating agency. We showed that most national and regional leaders in Russia operate on high concentrated markets with low level of competition. There are several other ratings of leading companies. It is necessary to mention Global 2000 rating which is based on Thomson Reuters Fundamentals Worldscope data and is constructed with the help of FactSet Research system. This rating takes into account same indicators: turnover, gross profit and capitalization. Only information on public companies trading on stock market is used. 26 Russian corporations were included into the set of 2000 world biggest firms in 2011.

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DOMESTIC BANKS' RESPONSES TO THE ENTRY OF FOREIGN BANKS IN CHINA

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ABSTRACT

China is a unique market because, before 2006, the presence of the foreign banks in China was negligible. Prior to this time, the market was competitive locally but relatively dominated by the Big Four state-owned banks. The historical development of China's market provides an opportunity to investigate important questions regarding the functioning of the market for banking services that are difficult, if not impossible, to test in other globally established markets. The purpose of this study is to examine the effect of the market entry of the foreign banks into China on transaction and service fees charged by the domestic banks. Market research has little to offer on local bank pricing responses to the entry of foreign banks in any market, mainly because in western countries such as the Canada, England, and the United States, those foreign banks are the oldest banks operating in the market. Thus, we rely primarily on the incumbent pricing literature (Simon 2005; Geroski 1995) to help us develop our specific hypotheses and empirical tests. Using data from the annual reports of Chinese listed banks from 1994 to 2009, this paper examines whether domestic banks cut transaction and service fees in response to foreign bank entry and whether ownership structure is associated with domestic banks' pricing response to the entry of the foreign banks. Results suggest that domestic banks cut the transaction and service fees before entry but state-owned domestic banks did not.

Keywords: *China, Domestic banks, Foreign banks, Market, State-owned banks, Transaction and service fees*

1 INTRODUCTION AND LITERATURE

China is a unique market because, before 2006, the presence of the foreign banks in China was negligible. Prior to this time, the market was competitive locally but relatively dominated by the Big Four state-owned banks. The historical development of China's market provides an opportunity to investigate important questions regarding the functioning of the market for banking services that are difficult, if not impossible, to test in other globally established markets. The purpose of this study is to examine the effect of the market entry of the foreign banks into China on transaction and service fees charged by the domestic banks. Market research has little to offer on local bank pricing responses to the entry of foreign banks in any market, mainly because in western countries such as Canada, England, and the United States, those foreign banks are the oldest banks operating in the market. Thus, we rely primarily on the incumbent pricing literature (Simon 2005; Geroski 1995) to help us develop our specific hypotheses and empirical tests. Using data from the annual reports of Chinese listed banks from 1994 to 2009, this paper examines whether domestic banks cut transaction and service fees in response to foreign bank entry and whether ownership structure is associated with domestic banks' pricing response to the entry of the foreign banks. Results suggest that domestic banks cut the transaction and service fees before entry but state-owned domestic banks did not.

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This study examines the effect of the entry of the large multinational banks on the transaction and service fees charged by domestic banks in China. The entry of new firms has important effects on incumbent firms and clients. New entrants increase competition, reducing market share and profits of incumbent firms. It is obvious, therefore, that incumbents have strong incentives to deter entry, and/or protect their market share while entry is beneficial to clients as new firms lower prices for banking products, increase access to finance, forcing incumbents to become more efficient and innovative. In the event of entry, incumbents have to decide on the most effective response in the face of increased competition (Simon, 2005). Specifically, we use transaction and service fee and other relevant data to examine the domestic incumbent banks' pricing responses to the increasing presence of the large foreign banks in the Chinese banking market.

The incursion of foreign banks into the long protected local market has been a gradual process, accelerated by the terms of China's 2001 entry into the World Trade Organization (WTO). From 2001 to 2006, previously the foreign banks were limited to handling foreign currency services and in some cases Chinese currency services for corporate customers. At the same time, state-owned local banks have been rushing to restructure and forming alliances with foreign partners as they work on upgrading services, technology and management.

With the continued opening up of the banking sector under the terms of China's WTO accession, by the end of 2006, there have been a number of foreign banks investing in China's financial sector. The year of 2006 saw an influx of foreign institutions buying into Chinese retail banks in advance of the new WTO measures to allow foreign banks to compete on more equal terms with local institutions. That is, China removed all geographic and business restrictions on overseas banks in line with its WTO commitments. As of December 2006, overseas banks operating in China must incorporate locally to offer the same services as local banks, such as wealth management, mortgage loans and credit cards. In 2005, JPMorgan became the first foreign company approved to set up a locally incorporated bank in Beijing. In 2006, other locally incorporated banks include, Citibank, HSBC, Standard Chattered Bank and ABN Amro. It is also expected that more than 20 to 30 banks will incorporate locally in China by 2010.

According to data reported by the China Banking Regulatory Commission (CBRC), at the end of 2006, 74 foreign banks from 22 different countries and regions had established 200 branches and 79 sub-branches in 25 Chinese cities. A further 242 representative offices have been established. Table 1 presents shows the total assets of State-owned banks, foreign banks, and other listed domestic banks. Assets of foreign banks in China have climbed steadily. In particular, in 2007, assets of foreign banks doubled.

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Table 1: Total assets of domestic and foreign banks (www.stats.gov.cn/tjsj/ndsj/;
www.cbrc.cn/Chinese/info/twohome/index.jsp?itemCode=9)

Billion Yuans

Year	State-owned domestic banks*	Increase from last year	Other stock-owned domestic banks**	Increase from last year	Foreign banks	Increase from last year
2009	400890	25.9%	117850	33.7%	n/a	n/a
2008	318358	13.7%	88131	21.6%	13739	10.9%
2007	280071	24.3%	72494	1.5%	12391	51.2%
2006	225390	14.7%	71419	22.9%	8194	29%
2005	196580	16.1%	58125	23.7%	6353	23.7%
2004	169321	11.4%	46972	23.1%	5137	54.2%
2003	151941	12.1%	38168	n/a	3331	15.6%
2002	135496	n/a	n/a		2881	n/a

*The state-owned domestic banks include the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the Bank of China (BOC), the China Construction Bank (CCB), and Bank of Communications (BOCOM).

**The stock-owned domestic banks include CITIC Industrial Bank, Everbright Bank of China, Huaxia Bank, Guangdong Development Bank, Shenzhen Development Bank, China Merchants Bank, Shanghai Pudong Development Bank, Industrial Bank, China Minsheng Banking Co. , Evergrowing Bank, China Zheshang Bank and China Bohai Bank.

Theories of entry deterrence and incumbent response to entry have generated a variety of predictions (Bain, 1956; Modigliani, 1958; Milgrom and Roberts, 1982). Empirical research across several industries has produced inconsistent results (Frank and Salkever, 1997; Yamawacki, 2002; Desai et al., 2012). Simon (2005) suggested that results may be varied because incumbents vary in their incentive to respond to entry and those incumbents with greater incentives to respond are more likely to respond aggressively. This paper tests the predictions of the entry pricing literature in the Chinese banking market by studying the pricing response of the local banks in China to the entry of the large multinational banks.

This study has important implications for the large multinational banks as it provides useful information about the pricing strategies likely to be used by local banks in a new market. Local banks in emerging markets can also gain useful insights about the pricing strategies adopted by the large multinational banks when they enter a market. Huang and Xu (2006) study the efficiency of the domestic banks for 10 years from 1996 to 2005, but not the price response of these banks to the entry of the large multinational financial institutions. Mao and Li (2006) study the reaction of Chinese local banks to a potential entry of foreign banks in Chinese banking market through examining domestic banks' interest margins. This paper investigates the effect of the foreign entry in Chinese banking market by examining the

transaction and service fees charged by the local banks before and after the foreign entry. It finds that incumbent local banks reduced transaction and service fees in 2005, the year immediately before the expansive entry of the large multinational banks in the market, but the incumbent local banks did not reduce transaction and service fees post entry in 2006 to 2009.

The paper is interesting to policy maker, academics and bank management. In particular, recently there were many recent discussions regarding large abnormal profits earned by domestic banks in the years of 2010 and 2011; at the same time, there was also an observation of foreign banks shrunk in the Chinese banking market. It implies that domestic banks earned more profits when there were less competitions from foreign banks.

2   LITERATURE AND HYPOTHESIS

2.1   Entry Pricing Literature

Several empirical papers, across various industries, have studied incumbent pricing responses to entry and report conflicting results (Joskow et al., 1994; Windle and Dresner, 1995; Frank and Salkever, 1997; Desai and Zeng, 2012). Given the lack of consistent findings, Yamawacki (2002) posits that incumbent pricing responses to entry are firm-specific, depending on the incumbent's ability to respond to entry, which in turn depends on its relative resource position. Simon (2005) offers a more general explanation for why some firms may respond to entry more aggressively than others: incumbents vary in their incentive to respond to entry. Several factors influence the incumbents' response to entry such as the incumbent's age, the incumbent's scope of services, and the market structure. This is consistent with Yamawacki's (2002) argument that responses may be firm specific depending on the specific incumbent's resource position. Further it suggests the potential for a complicated interaction between firm specific factors and market structure.

2.2   Incumbent pricing expectation in a banking setting

Existing literature on the effects of legal, institutional and other factors on banking competition includes Barth et al. (2003), who found that more restrictive entry requirements are negatively linked with bank efficiency, which led to higher expenses and interest rate margins. Moreover, restricting foreign bank participation tent to increase local bank fragility. Demirgüç-Kunt et al. (2003) studied the impact of bank concentration and regulations on bank efficiency. They find that bank concentration has a negative and significant effect on the efficiency of the banking system except in developed countries with sound financial systems and economic freedoms. Furthermore, they find bank- level-based support that regulatory restrictions on entry of the new banks, particularly concerning foreign banks, and implicit and explicit restrictions on bank activities, are associated with lower levels of bank margins. Laessens and Laeven (2003) used bank-level data in 50 countries and found that banking systems are more competitive with more foreign entry and less entry restrictions. However, there is no significant negative relationship between bank competition and concentration.

A number of studies examined the effect of foreign bank entry on local banking market and found that entry of foreign banks improves competition and force domestic banks become more efficient. Claessens et al. (2001) investigated the role of foreign banks and showed that entry by foreign banks made incumbent local banks more efficient by reducing margins. Okuda and Suvadee (2007) examined the impact of foreign bank entry on Thai domestic banks. They found that the increase of presence of foreign banks made domestical banks increase overhead expenses, reduce profits and increase the interest spreads. Liuhto et al.

(2006) examined the central and eastern European banking market and found that foreign bank entry reduced local banks' revenue from both interest and non-interest activities, and raised overhead expenses of local banks. Manlagnit (2011) studied the effect of liberalization of foreign bank entry in Philippines and found that entry of foreign banks improved competition to the extent that it reduced profits and overhead costs of domestic banks.

The above literature studies the impact of entry of foreign banks on domestic banks performance. It focuses on how domestic banks reacted post-entry. One paper (Mao and Li, 2009) investigated how local banks reacted before entry by examining their responses to a potential foreign entry in China, when the country jointed WTO and promised to remove entry barriers for many products and services. They found that incumbent local banks lowered their interest margins when facing a potential entry of foreign banks and thus their earnings were reduced. Since interest margin, used in Mao and Li (2009), is more likely to be subject to government regulations in China, we used service fees charged by Chinese local banks to study the response of domestic banks to the entry of foreign banks. Therefore, our paper adds to this literature by examining the service fees charged by the domestic banks at the time of both before and after entry by the foreign banks.

In summary, we offer the following hypotheses:
> *Hypothesis 1: Local banks significantly reduced their service fees when facing a potential entry by large multinational banks.*
> *Hypothesis 2: Local banks significantly reduced their service fees post entry by large multinational banks.*

3 MODEL SPECIFICATION AND DATA COLLECTION

Financial data is collected from the China Stock Market Financial Statement Database (CSMAR). The database covers all corporations listed on the Shanghai Stock Exchange or Shenzhen Stock Exchange for their financial statements since 1990. The firms selected for this study meet the condition that they are in the banking sector with financial statements available in any year from 1994 to 2009.

To investigate the pricing response of incumbent banks, a longitudinal transaction and service fee model is used for the full sample for the entire data span of 1994 to 2009. In this model, the purpose is to compare the transaction and service fees charged by the domestic banks to their clients or customers before or after the time of entry.

$$FEE_{it} = \alpha_0 + \alpha_1 SIZ_{it} + \alpha_2 ROA_{it} + \alpha_3 LEV_{it} + \alpha_4 STA + \alpha_5 CPI_t + \alpha_6 Y05 + \alpha_7 Y06 - 09 + \varepsilon_{it}$$

Where,
> *FEE*= the ratio of commission and fee income over the sum of commission and fee income and interest income
> *SIZ*= the natural logarithm of total assets
> *ROA*= net income divided by total assets
> *LEV*= long-term debt divided by total assets
> *STA*= indicator variable (1=the state-owned domestic banks, including the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the Bank of China (BOC), the China Construction Bank (CCB), and Bank of Communications (BOCOM))
> *CPI*= consumer price index

Y05= indicator variable (1 = year 2005)
Y06-09 = indicator variable (1 = year 2006-2009)

Y05 and Y06-09 are indicator variables that seek to capture the domestic banks' response before and after the entry of the multinational banks. Should incumbent domestic banks reduce their transaction and service fees in response to new entrants, these variables are expected to be negatively related to *FEE*.

FEE is measured as the commission and fee income, which can be obtained from income statement. *CPI* can be obtained from national statistics of China.

The control variables include, firm size (*SIZ*), measured as the log of total assets; return on assets (*ROA*), measured as profit, divided by total assets; Leverage (*LEV*), measure as the ratio of long-term debt to total assets; ownership structure (*STA*), a indicator variables for banks owned by the state; and *CPI*, consumer price index, used to control for inflation rate.

4   TESTING RESULTS

Table 2 provides descriptive statistics of the variables including mean, median, 1st quartile, 3rd quartile, maximum, minimum, and standard deviation values. For example, the mean value of firm size is 11.6; leverage ratio is 0.95; profitability is 0.01; The mean value of bank service fees is 0.08; median value is 0.07; maximum value is 0.24 while minimum value is 0.01.

Table 2: Descriptive statistics of variables

	Mean	1st Quartile	Median	3rd quartile	Stdev	Max	Min
SIZ	11.63349	11. 15073	11.65363	12. 06181	0.72497	13.07133	9.970248
LEV	0.946395	0. 93117	0.951147	0. 968022	0.026319	0.9816	0.869288
ROA	0.011239	0. 007032	0.010839	0. 013669	0.006116	0.034319	0.000834
CPI	1. 038010	1. 015000	1. 048000	1. 052000	0. 037782	1. 241000	0. 986000
FEE	0.083529	0. 045575	0.070996	0. 115308	0.049836	0.240222	0.009973

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Table 3 presents the correlation matrix showing the correlations between major variables. The largest absolute value of the correlation is 0.7642 between *LEV* and *ROA*.

Table 3: Correlation matrix

	SIZ	LEV	ROA	Y05	STA	FEE
SIZ	1					
LEV	0.245002	1				
ROA	−0.18935	−0.76424	1			
Y05	0.16482	0.131142	−0.12245	1		
STA	0.636181	0.064369	−0.06272	0.086422	1	
FEE	0.749645	−0.07806	0.160505	−0.04885	0.598905	1

FEE= the ratio of commission and fee income over the sum of commission and fee income and interest income
SIZ= the natural logarithm of total assets
ROA= net income divided by total assets
LEV= long-term debt divided by total assets
STA= indicator variable (1=the state-owned domestic banks, including the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the Bank of China (BOC), the China Construction Bank (CCB), and Bank of Communications (BOCOM))
Y05= indicator variable (1 = year 2005)

Table 4 reports results for the empirical regression model. The coefficient on Y05 is negative and statistically significant at 0.02 level, suggesting that, on average, incumbent domestic banks cut prices before entry by the foreign banks into the Chinese banking market. It is consistent with the finding by Mao and Li (2009), who found that domestic banks cut prices (interest margins) when facing a potential foreign entry.

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Table 4: Transaction and service fees for listed banks

Model

$$FEE_{it} = \alpha_0 + \alpha_1 SIZ_{it} + \alpha_2 ROA_{it} + \alpha_3 LEV_{it} + \alpha_4 STA + \alpha_5 CPI_t + \alpha_6 Y05 + \alpha_7 Y06 - 09 + \varepsilon_{it}$$

Parameter	Est value	St dev	t student
Int	−0. 43069	0. 196601	−2. 19068*
Y05	−0. 03187	0. 011528	−2. 7647**
STA	0. 021475	0. 008327	2. 579091**
Y06−09	0. 018024	0. 010022	1. 798443
SIZ	0. 039403	0. 007978	4. 938822***
LEV	0. 017806	0. 193863	0. 091847
ROA	1. 98671	0. 865409	2. 295688*
CPI	0. 001537	0. 106698	0. 014409
R2(adj)	0.685369		

*** Significant at 0.01 level; ** significant at 0.02 level; * significant at 0.05 level based on two-tail t test

FEE= the ratio of commission and fee income over the sum of commission and fee income and interest income
SIZ= the natural logarithm of total assets
ROA= net income divided by total assets
LEV= long-term debt divided by total assets
STA= indicator variable (1=the state-owned domestic banks, including the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the Bank of China (BOC), the China Construction Bank (CCB), and Bank of Communications (BOCOM))
CPI= consumer price index
Y05= indicator variable (1 = year 2005)
Y06-09 = indicator variable (1 = year 2006-2009)

The coefficient value on Y05 is -0.032, which suggests that local Chinese banks, on average, cut prices by around 3.2% in 2005.

The coefficient on Y06-09, however is not significant, suggesting that, domestic banks did not cut prices post entry by the foreign banks.

Three control variables of *SIZ, ROA* and *STA* are positive and statistically significant, which suggests that, (1) large domestic banks charge high transaction and service fees to their clients or customers; (2) profitable banks charge high transaction and service fees; and (3) state-owned banks charge high transaction and service fees. The reason why large or state-owned banks can charge high transaction and service fees may be due to their reputation for high quality services.

The revised R-squared is 0.685.

5 DISCUSSION AND CONCLUSION

The results of this study indicate that entry had a significant effect on incumbents' pricing in the Chinese banking market. One industry-specific explanation for the effect of entry may be the previously relatively low rate of entry in the banking market due to entry barriers. Because entry was rare in the Chinese banking market, incumbent domestic banks, when faced with serious competition, were motivated to cut prices, i.e., transaction and service fees charged to clients, to protect their market share and salvage some monopolistic profits. However, this finding should be treated with caution as it was not robust to changes in the timing of its measurement, changes in the estimation approach, and changes in the sample.

There are, of course, limitations in this paper which need to be addressed. One concern with this study is that local banks may respond to entry with non-price strategies. For instance, incumbent banks may upgrade the quality of their services (e.g., shortening clients' waiting time) or provide more services at the same price. These non-price responses however, may tend to be cost increasing, leading to price increases (or reductions in margin). As a result, these non-price responses may cause a spurious, positive relationship between entry and price (Simon 2005). This may create a bias against finding a negative relationship between entry and price, thereby strengthening the results found in this paper.

Further more, there were arguments regarding the large abnormal profits earned by domestic banks in the recent years of 2010 and 2011, when there was also an observation of foreign banks shrunk in the Chinese banking market, which implies that domestic banks earned more profits when there were less competitions from foreign banks. Therefore, further researches may examine domestic banks' reactions to the withdrawal of foreign banks.

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Entrepreneurship Between Creativity and Bureaucracy

METHODOLOGICAL APPROACH TO THE MANAGEMENT ENHANCEMENT IN SMALL INNOVATIVE COMPANIES BASED ON THE STUDY OF FEATURES OF THEIR BUSINESS MODELS

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ABSTRACT

Innovations play increasingly crucial role in the economics of developed countries today. Entrepreneurship, inherently innovative and high-risk, is a key aspect in the innovation creation and diffusion. Most researchers agree to the fact that the development of the innovative business largely depends on the business model chosen by management since the successful commercialization of innovation and business growth are provided by two interrelated processes: technological innovations and business model change under which the economic logic of the company described in the terms of specific characteristics of criteria is understood. The correct choice of the business model is particularly important for small innovative companies that carry the highest risk of the initial stages of commercialization of innovations. Analyses of domestic and foreign literature in this field shows that the main objects of research are mechanisms of small innovative companies' creation while their development process is usually studied at the level of isolated case studies. The variety of innovations, specificity of their commercialization and, as a result, peculiarities in innovative business management causes the poor level of knowledge of small innovative companies. For this reason the issue of the development of a systematic approach to the study of economic logic of this kind of business as well as identification of possible strategies for small innovative enterprises is rather urgent. The author suggests a methodological approach combining four basic parameters found in the treatises of the majority of researches with criteria describing the activities of small innovative companies. It includes:

1) *Method for the identification and analyses of the business models of small innovative companies;*
2) *Classification of small innovative companies;*
3) *Description of their standard business models;*
4) *Matrix of possible strategies for small innovative companies and recommendations for its application for entrepreneurs.*

Keywords: *Business model, Entrepreneurship, Innovation, Small innovative companies, Strategy*

1 INTRODUCTION

Innovations play an increasingly crucial role in the economics of developed countries today. Entrepreneurship, inherently innovative and high-risk, is a key aspect in the innovation creation and diffusion. Most researchers agree to the fact that the development of the innovative business largely depends on the business model chosen by management since the successful commercialization of innovation and business growth are provided by two interrelated processes: technological innovations and business model change under which the economic logic of the company described in the terms of specific characteristics of criteria is understood.

The correct choice of the business model is particularly important for small innovative companies that carry the highest risk of the initial stages of innovation commercialization. Analysis of domestic and foreign literature in this field shows that the main objects of research are mechanisms of small innovative companies' creation while their development process is usually studied at the level of isolated case studies.

The variety of innovations, specificity of their commercialization and, as a result, peculiarities in innovative business management causes a poor level of knowledge of small innovative companies.

For this reason the issue of developing a systematic approach to the study of economic logic of this kind of business as well as identification of possible strategies for small innovative enterprises is rather urgent. It should be noted that there is lack of empirical research at this field, so the relevance and the need of such kind of study is obvious.

Fundamentals in the theory of innovative entrepreneurship were laid in the works of T. Schultz, W. J. Baumol, K. Menger, F. A. Hayek, and J. Schumpeter. Later various aspects of innovative enterprise were considered in the research of L. Abalkin, T. Davila, I. Dezhina, P. Drucker, A. Dynkin, V. Ivanova, F. Johansson, P. Kvintas, G. Kleiner, C. Christensen, J. Magretta, H. Mintzberg, M. Porter, B. Santo and many other academics whose works became the basis of the theoretical framework of this study. The accumulated experience of empirical studies of innovative entrepreneurship can be characterized by considerable heterogeneity and, consequently, by difficulty of the interpretation as it has no common base for comparative analyses which can become a business model concept.

Basis of the business model concept were formulated by A. Afuah, L. Bossidy, D. Debelak, M. Johnson, H. Kagermann, S. Cantrell, B. Katkalo, V. Kotelnikov, J. Lindrel, C. Markides, A. Osterwalder, J. Ricard, A. Slivotski, N. Strekalova, C. Tucci, G. Hamel, H. Chesbrough and others.

The proposed concepts and methods of research have limitations caused by the peculiarities of small innovative companies which give the draft to the research, defining its purpose and solving problems.

2   METHODOLOGICAL APPROACH TO THE STUDY OF BUSINESS MODELS OF SMALL INNOVATIVE COMPANIES

The analyses of the different approaches to the business model concept of researches showed the diversity of their views on the essence of the phenomenon. Thus some authors are more focused on creating value and defend business model as "a description that explains how companies work" trying to understand the nature of this process. For others, the business model is more related to the assignment of value, and therefore focuses on how to generate income and profit. Others offer a broader view of the business model which includes two aspects: creation as well as assignment of value. And, finally, the fourth consider a business model as a unit of analyses which covers the accumulation of potential value creation in the process of interaction between the company and its stakeholders.

In fact, despite the difference in emphasis all given interpretations of this concept are close enough which allows us to identify business model as the economic logic of the company described in the terms of specific characteristics of criteria. Review of a number of domestic

and foreign researches showed that four parameters are present at the approaches and methods of all authors: value for customer, revenue model, the key processes and resources (Table 1). The rest are determined by the specific character of the studied companies.

Table 1: Comparative analyses of the approaches to the business models research

Author of the approach	Business models' characteristics	The methods used	Peculiarities
Afuah and Tucci	*Value for customers*, market share, pricing, revenues, maintenance activities, performance, competence, stability	List of control questions	3 levels of analyses: incomes + profitability + qualitative parameters of business model
Chesbrough	The scale of investment to support business model. The degree of openness of the model	List of questions; 6 types of business model	Innovation process management and management of intellectual property
Johnson and others	*Customers' value of a product, profit formula, key processes and recourses*	Structure of analyses is suggested	3 general types of business models are identified with examples of industries
Debelak	Characteristics of clients, customer value for the company, *value for customers, profits from sale*, investment, attraction of new customers	Ranking of business model characteristics	Assessment of the business model condition
Lindrel and Cantrell	The need to change the business model	7 mechanisms of changes	Singular focus on changes
Osterwalder	*Key partners, key activities, offer advantages*, relationship with customer, customer segments, *key resources*, supply chains, cost structure, *incomes*	List of control questions	2 levels of analyses: TCC+ qualitative characteristics of business model
Authors' approach	position in the industry business system, *created value for customers, model of income generation*, types of innovation, *success factors and problem areas*	In-depth interview	Specificity of small innovative business; standard business models and strategies

In this regard, the limitations of existing methods for small innovative business were identified. The majority of them are caused by the complexity of determining the presence of basic characteristics of business models which are necessary for a certain method. The most important are the following:
- Owner / manager cannot always define how the company creates value for customers and as a result profits;
- Managers of small innovative companies usually do not know about the occupied share of the market, consumer segments and their characteristics;
- Architecture of such companies often has not yet developed, the business is largely dependent on stakeholders – the parent institution, the leader of the company, suppliers and customers.

The author suggests a methodological approach combining four basic parameters found in the treatises of the majority of researches with criteria describing the activities of small innovative companies. It includes:

1. Method for the identification and analyses of the business models of small innovative companies;
2. Classification of small innovative companies;
3. Description of their standard business models;
4. Matrix of possible strategies for small innovative companies and recommendations for its application for entrepreneurs.

3 METHOD OF ANALYSES OF BUSINESS MODEL CONSIDERING PECULIARITIES OF SMALL INNOVATIVE BUSINESS

The method of analyzing business models of small innovative companies is developed in the framework of systematic approach that provides an opportunity to return to any of its phases as more information occurs (Figure 1).
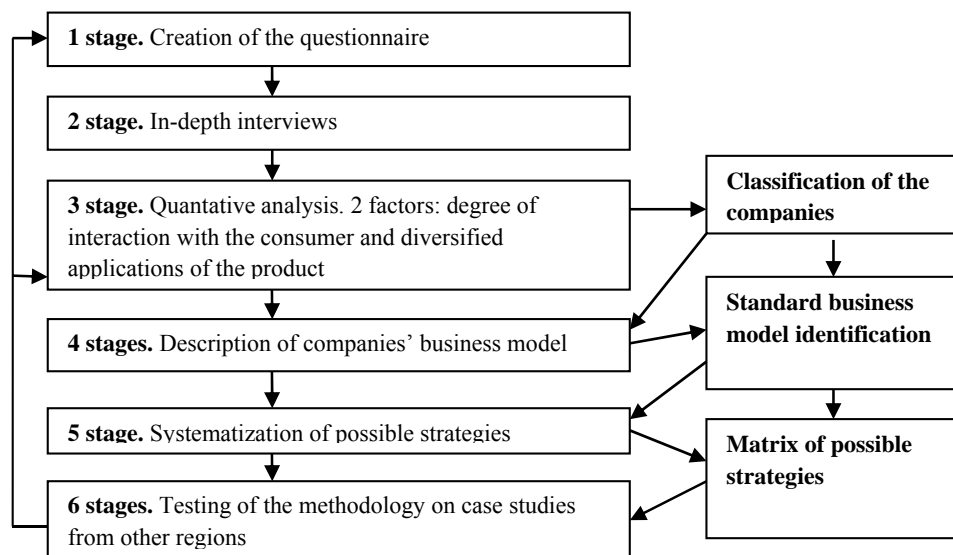

Figure 1: Scheme of the analysis method of a business model

4 CLASSIFICATION OF SMALL INNOVATIVE COMPANIES ON THE BASIS OF EXERCISED BUSINESS MODEL

A major limitation of the most of the considered methods of classification with a respect to small innovative companies (classification of the European Commission in 2003, typology by K. Pavitt, J. Tidd and J. Bessant, types of competitive strategies by L. Romensky etc.) is their unspecialized nature, not taking into account peculiarities of SME. Proposed approach to classification is based on the factors that determine peculiarities of companies' business model: degree of interaction with consumer and diversified applications of the product. The last can be understood as characteristic of a position of a company in an industry business system, and the second factor – the degree of interaction with consumer – allows taking into consideration such characteristics of the company as innovation and "commodity maturity" of the companies' offer (Figure 2).

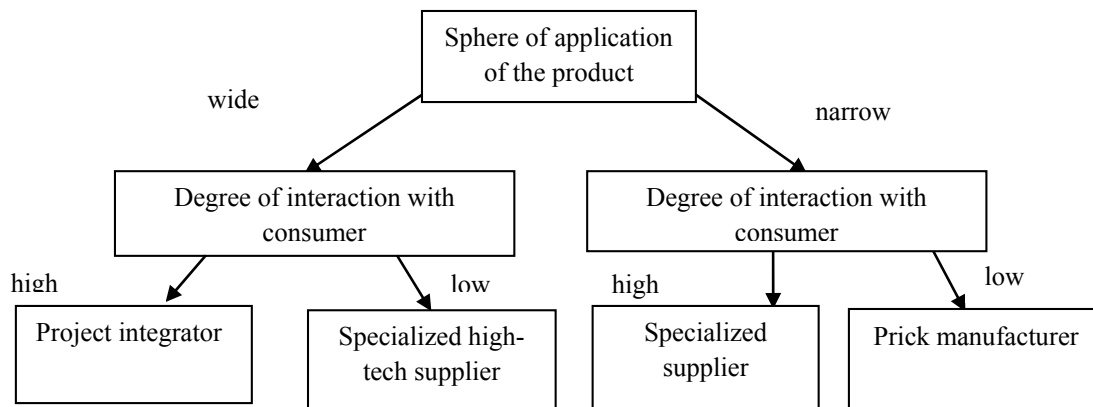**Entrepreneurship Between Creativity and Bureaucracy**

Figure 2: Classification of small innovative companies

The study identifies four groups of companies whose characteristics are given in Table 2.

Table 2: Characteristics of small innovative companies

First group (6,7 %)	Second group (30 %)	Third group (30 %)	Fourth group (33,3 %)
Project integrator	Specialized high-tech supplier	Specialized supplier	Prick manufacturer
Virtual structures Project factory / shell company Work in any market. Owner of the rights to intellectual property Not involved in promoting. Flexibility and territorial proximity to customers. Incremental and partly radical innovations	Leaders in their sphere. The significant role of intellectual property and links with the scientific community. Orientation to the worlds' markets. General purpose technologies. Solutions to the specific needs of clients from high technology industries. Part-time employees/ commercialization of state research centers innovations	Solutions do not lead to a change into consumers' technological paradigm but contribute to the efficiency of their business Proposal is determined by application tasks of the consumers. Orientation on import substitution. Reputation is significant Incremental innovations. «Niche» inhabitants.	Offer products to a wide market. Prick product. The need for product already exists but the market has not yet formed Significant role of distribution networks, operating efficiency of the business. Marketing and organizational innovations. Finished integral product.

The first group includes two types of structures: project factory – the company that accumulates a pool of ideas and grows them up into itself; and the shell company that transmits part of its business functions to outsourced contractors.

Companies included into the second group are leaders in their field. Intellectual property, liaisons with the scientific community and focusing on the global markets are significant for them. Companies of this group produce products with the use of general purpose technologies.

The key differences of the companies of the third group are that solutions proposed by them do not lead to a change into consumers' technological paradigm but contribute to the efficiency of their business. Their proposal is determined by application tasks of the consumers.

The companies of the fourth group offer products to a wide market. As usual it's a prick product, the need for which already exists but the market has not yet formed.

5   STANDARD BUSINESS MODELS OF SMALL INNOVATIVE COMPANIES

The proposed classification allowed distinguishing standard business models for each group of companies.

A peculiar type of business model inherent to a group of companies described by terms of a certain key indicators is understood by "standard model" in the research. As such important indicators for the companies' business model are considered: position in the industry business system, created value for customers, model of income generation, types of innovation, success factors and problem areas (Table 3). Detailed characteristics listed in the Table 3 are given in the thesis and publications of the author.

For example, a "prick manufacturer" model is executed by ten companies (30% of respondents). These are companies that work not only in segment of B2C, but also in the segment of B2B. These small innovative companies offer finished product to the market, the demand for which already exists but the market is not yet formed.

The most important characteristic of consumer product value of these companies is impact point accuracy: how well it fits exact consumer need. The position of such companies in the industry business system cannot definitely be determined; it can be anything – from the complete cycle companies with progressive marketing functions transfer to partners to patent / know-how owners with the highest outsourcing of all processes. A key feature of the implementation of their activities is the scale of production with a constant expansion of the range of manufactured goods and instant cost management.

Supply chains and work with consumers play crucial role for them. Dealer, as usual, is a company – a major player in the related market with recognized brand.

The most of these companies have complete finished product which can form a market segment. The majority of companies with such business model are newcomers. They have recently been on the market, but some of them have been able to overcome the "valley of death" and find their customers. Others are in the early stages of their development addressing organizational and market challenges. The numbers of employees in them vary from 3 to 200. They usually have their own resource base and R&D department. These companies carry out most organizational and marketing innovations.

Table 3: Standard business models of small innovative companies

Business model key features	Business model type			
	Project integrator	Specialized high-tech supplier	Specialized supplier	Prick manufacturer
Position in the industries business system	Diverse	Specialized supplier for various industries	Supplier for traditional industries	Diverse
Created value for customers	Complex solutions of the unique problems	High innovation	Increase in efficiency	Rational / marketing
Model of income generation	Diversification of supply	Export orientation	Import substitution	Operating efficiency
Types of innovations	Proactive innovation (push)	Proactive innovation (push)	Custom innovation (pull)	Mixed type of innovation (pull/push)
Success factors	Flexibility and mobility in decision-making, *territorial proximity to the consumer*, special competence	*Close relationship with science*, flexibility, complex solutions, high reputation	Expertise in narrow field, *the ability to adopt them to a peculiar customer*, customer service	Meet customer needs *more effectively* than competitors
Problem areas	Excessive dependence on the external environment and the willingness of the consumers to change	Excessive dependence on the leader	Encumber by assets, companies shift to production type	The need to establish *sales channels*

6 MATRIX OF POSSIBLE STRATEGIES FOR SMALL INNOVATIVE COMPANIES AND RECOMMENDATIONS FOR ITS APPLICATION FOR ENTREPRENEURS

Analyses of collected empirical data supplemented by theoretical concepts allowed forming a matrix of possible strategies of small innovative companies (Table 4).

Quadrant I – possible strategies: assignment of rights to intellectual property to consumer or realization of the product with the ability to create a legal entity.

Quadrant II – possible strategies: comprehensive product +1 strategy, bowling strategy (in the terminology of G. Moor). Identifying new areas of application of the product company creates subsidiaries. Future scenarios: the creation of partnership with global corporations or transformation to engineering firm.

Quadrant III – possible strategies: protection of its own market niche or bowling strategy with preservation of focus on the consumers from traditional industries. As the company grows the possible strategy is establishment of subsidiaries in order to stay in the small business category.

Table 4: Matrix of possible strategies of small innovative companies

Sphere of product application	Degree of interaction with consumer	
	High	Low
Wide	**I. Project integrator** *Strategy:* project implementation, assignment of rights	**II. Specialized high-tech supplier** *Strategy:* comprehensive product +1, creation of subsidiaries, bowling strategy
Narrow	**III. Specialized supplier** *Strategy:* niche strategy, creation of subsidiaries, bowling strategy	**IV. Prick manufacturer** *Strategy:* variety of strategies with a focus on business development and increasing of efficiency

Quadrant IV – possible strategies: diverse but focused on business development and increasing of effectiveness. A certain strategy depends on the type of the market company operates, the duration of companies' existence as well as on non-market factors.

Positive testing of the proposed methodology on the case studies of small innovative companies from other regions is presented in Table 5.

Table 5: Positive testing of the method of analyses of business models

company №	Product	Sphere of application	Strategy	
			Type	Description
1	Probe microscopes, atomic scale	Science, medicine	II	Expensive high-tech product; strategy is an investor attraction to expand production, subsidiary establishment
2	Device for control of metal quality	Metallurgy	III	Innovation increases the efficiency of a client; strategy is to occupy its' own niche, capture of related niches
3	Drug marker	Medicine	IV	Has its' own niche, production is on outsourcing, distribution is given to huge distributor; strategy – diversification
4	Antifoam device	Food processing industry	III	Innovation improves the efficiency of the client; strategy is to occupy its own niche
5	iPad Apps	IT	II	The product complements famous brand; global cooperation is the strategy
6	Cure for schizophrenia	Medicine	IV	Own niche is found

7   CONSLUSION
In this paper the first step toward the systematic study of business models of small innovative companies' was made. Methodological approach to the study of business models was suggested that can be used as guidance on business model identification and its further modification in order to improve management system and develop adequate leaders' competences as every day more and more challenges appear.

Variety of business models chosen by small innovative companies' management provides movement, change and development of the national innovation system, combining science and industry, translating scientific achievements in popular consumer goods and services,

increasing productive potential of society. The work that has been done is only the beginning of the systematic study of these interesting processes as it raises more questions than it answers and provides a foundation for further work on the question on how the company successfully performs in the changing environment.

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Entrepreneurship Between Creativity and Bureaucracy

SMALL AND MEDIUM ENTERPRISES (SMEs) DEVELOPMENT AND POVERTY ALLEVIATION IN DEVELOPING COUNTRIES: EVIDENCE FROM EKITI STATE, NIGERIA

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ABSTRACT
The focus of the study is to investigate the role of small and medium enterprises (SMEs) in poverty alleviation in Ekiti state, Nigeria. Specifically, the study analysed the characteristics of SMEs in Ekiti State and then examined the socioeconomic factors influencing the capacity of SMEs to alleviate poverty. There are two reasons for this focus. First, the existing studies concentrated on aggregate effects of SMEs on poverty alleviation with little attention on individual traits of the firms in developing economies. Second, the existing studies failed to examine the underlying factors that could explain any weak relationship between small and medium scale enterprises development and poverty alleviation especially in developing economies. A systematic random sampling technique was used to select 75 respondents and structured questionnaire administered on them to collect relevant data used. The data were analyzed using descriptive statistics and probit regression. The results showed that majority(72%) of surveyed businesses were microenterprises employing less than 10 workers while only 21% and 7% of the respondents engaged in small scale and medium scale enterprises, employing between 10-50 and 51-250 workers respectively. The results also showed that business size, nature of business and source of capital were the major factors determining both income and employment generation potentials of the small and medium enterprises. Finally the results showed that income from business was the most significant determinant (p<0.01) of per capita consumption of the SMEs owners in the study area. The study therefore concluded that SMEs in Ekiti State, Nigeria had contributed to poverty alleviation through income generation and job creation.

Keywords: *Ekiti state, Poverty alleviation, Small and medium enterprises*

1 INTRODUCTION

Poverty has been one of the key economic problems facing the African continent in general and the Nigerian economy since independence. Since early 1990s, in Nigeria, there has been a decisive shift from the capital intensive large-scale industrial policy. The promotion and development of small and medium enterprises as a channel to poverty reduction is perceived as pertinent given the large geographical spread of poverty across ethnicities, large unskilled and unemployed rural and urban labour force and limited supply of capital. Most small and medium enterprises utilize local raw materials. In this regard SMEs are viewed as a subsector that creates substantial employment opportunity as they are relatively labour intensive and also employ more people per unit of investment when compared with large firms. Thus a given amount of capital will create more jobs, if it is spread over a large number of SMEs than if it focuses on few large firms. Discussions on development policy are paying increasing attention to the issues of how to reduce poverty, encourage economic empowerment of the citizen and growth through various reforms and developmental programs. This has brought a renewed focus from the macro perspectives of tackling poverty to micro-perspectives through the promotion of SMEs from both the government and the private sector.

Government at various levels has long recognized the need to promote the development of SMEs in order to reduce poverty; stimulate employment; mobilize local resources; reduce migration from rural to urban area and disperse industrial enterprise more evenly across the country. This prompted the establishment of various policy reforms and programmes in both state and federal levels of government. Unfortunately the impact of all existing credit schemes in providing funds for meaningful and sustained development among the SMEs had hardly been noticeable. The question still remains as to whether the development of the SMEs has reduced poverty and enhanced economic growth.

Notwithstanding the intense debate in both academic and policy making circles about the relationship between SMEs, economic growth and poverty reduction, much of the views about the links are void of any careful empirical analysis. Understanding characteristics and impact of small businesses on local economy is crucial in designing specific and appropriate development policies. Many researchers have made many attempts to establish statistical nexus between poverty rates and overall microeconomic performance on the basis of aggregate time series data. Some of these studies have produced results that rejected the view that small businesses are the engines of employment creation and economic growth (Rosenzweig, 1988). Most of these studies are cross-country specific whereas the experience of each country is not the same. In addition, different countries have priorities among competing policy goals .The absence of comparable international data on SMEs has hampered cross-country analysis of SMEs and poverty alleviation as countries are different in many respects.

Therefore, the broad objective of this study is to assess the role of SMEs in reducing incidence and prevalence of poverty among the people of Ekiti State, Nigeria. Specifically, the study analyses the types and forms of SMEs, and examines the factors influencing the capacity of the SMEs to alleviate poverty with a view to assessing the relative contribution of SMEs ownership to poverty reduction in the study area.

2   LITERATURE REVIEW

Literature is replete with different ways of classifying SMEs. Researchers such as Akerele (2000) classified SMEs as formal and informal SMEs, rural and high technology and knowledge driven small scale enterprises. SMEs in the informal sector are difficult to control as they fall outside the modern or formal sector of the economy. In most cases, these informal SMEs are based on indigenous technology e.g dyeing, pot making and brick making. However they contribute job creation. Many of these enterprises usually make use of simple and crude method of production (Dutta, 2005). Those SMEs in the formal sector are usually registered under the statutory company laws.Another classification of SMEs is the rural based SMEs. It is not actually easy to define the term rural SMEs. Some scholars are of the opinion that rural SMEs are those in cottage industry. Islam (1987) believes that the manufacturing enterprises using modern technology can also be so regarded. Some believe that rural enterprises must necessarily have a direct relationship with agriculture. It is important to know that diversifying rural economy through promotion of small business would amount to rural industrialization.Classification can also be viewed from the angle of the size of business. The United Nations Development Programme in its study UNDP (1988) defines micro enterprise as business engaging one to four employees while small enterprises are those with 5 to 25 employees. Others have classified those enterprises engaging 1 to 9 employees as micro enterprises and those engaging 10 to 49 as small enterprises while those engaging 50 to 300 employees as medium enterprises (CBN, 2005).We have adopted this classification in our

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study. The importance of identifying various classes of SMEs is to enable policy formulator to know the types of enterprises that could generate sustainable growth.

In spite of various opinions on the classification of SMEs, there are common characteristics of SMEs. These include the lack of capital,lack of managerial skill,crude technology and labour intensive (World Bank, 2005).

Over the years there has not been a consensus on the definition of poverty due to its multidimensional nature. However, appreciable efforts have been made to provide operational definitions of the concept. Aku et al., (1997), Sen (1981), Soludo (2004) define poverty as a condition of low consumption. Others have adopted broader definitions such as inability to meet basic material needs which include food, water, clothing, shelter, education, health as well as environmental requirement, such as air, serenity and basic non-material needs such as political and community participation, identity, dignity etc (Ajakaiye, 2001). In literature of poverty less attention has been paid to strategy of using small business development to alleviate poverty.

The definition of poverty in terms of subsistence level of living has given rise to the concept of absolute poverty which has been defined as lack of sufficient income or earnings to obtain the minimum necessities of life (Akinlo, 2004) and Ogwumike (2001). The concept of absolute poverty has received a lot of criticisms. It appears only expenditure relating to those basic necessities of life would be considered. For instance, one may have enough money but divert it to non-basic needs. Another problem of absolute poverty is difficulty in determining the necessary minimum standards for subsistence living which will form the basis of identifying the poor from the non-poor.Absolute poverty also ignores the influence of socio-cultural factors. Poverty should in addition to lack of sufficient income to meet basic needs but also all other aspects of individuals related to marginalization, vulnerability, powerlessness. Owing to the weaknesses of absolute poverty, the concept of relative poverty arose. Relative poverty has been viewed as a situation where individual income overtime fell short of the average income of the average in the society in which they live. The relative poverty may be as a result of unbalanced distribution of resources. The problem with concept of relative poverty is that it lacks a scientific basis for determining the lowest limit to which the average income of the household should fall to become relatively poor.

 The problem associated with both the absolute poverty and relative poverty is that the two concepts focus mainly on economic resources. This has led to failure of policies and programme in most developing countries as attention is usually concentrated on economic issues of poverty at the neglect of other socio-cultural and political issues.

In order to develop a more robust concept of poverty, Ajakaiye, (1989) was of the opinion that a review of theory of human need would be important. He supported the theory of human needs would be important. He supported the theory of human needs. The theory states that basic human needs should be able to establish links among individual needs, the achievement of goals and social institution in addition to the framework of Maslow hierarchy of needs. Ajakaiye (1998) therefore looks at poverty concept to include in addition to economic factors, enabling socio-cultural and political system which will eliminate weaknesses of the instant perpetrating poverty.

United Nations Development Programme (UNDP, 2005) introduced another dimension of poverty-human poverty. UNDP (1997) classified poverty into two aspects namely income poverty and human poverty. The income poverty comprises both absolute/extreme poverty and overall/relative poverty. These are based on economic and basic needs perspective but the concept of human poverty focuses on what individuals have or do not have. This study looked at both the economic and non-economic aspects of poverty.

Literature is replete with poverty issues and SMEs development. Gebremariam (2004) examines the roles of small businesses in economic growth and poverty alleviation in West Virginia. In OLS and 2SLS regression analysis a positive relationship exists between small business and economic growth. A strong inverse relationship also exists between the incidence of poverty and small business and economic growth. Thus, the empirical result establishes the linkage between small business, economic growth and the incidence of poverty. But this study does not show systematic relationship between net job creation and firm size and the data used are state- specific.Small and Medium Enterprises (SMEs) have also been believed to be important in supporting economic development within a country (e.g.; CDASED, 1999). One of the important roles of SMEs in this context includes poverty alleviation through job creation. They find a strong, positive association between the size of the SME sector and the rate of economic growth. But, they do not find that SMEs cause growth. Furthermore, the comparisons do not indicate that SMEs exert a particularly beneficial impact on poverty or income distribution. Agupusi (2007) assessed the role of the small business sector in poverty alleviation in Alexandra and to examine both government and private sector initiatives for supporting small business development for poverty alleviation. It is observed that small businesses are not playing the expected role due to number of constraints including a lack of policy that deals adequately with the semi-formal and informal business sectors, the predominant sectors in Alexandra. There is also a shortage of small business development agencies that would help in developing a culture of entrepreneurship and business management skills. The overall finding indicates that with positive interaction between development agencies, and small businesses in Alexandra, predominantly informal and semi-formal SMMEs in Alexandra could not only alleviate poverty but could also contribute to the general transformation process.

In Nigeria, most of the studies on SMEs and poverty have concentrated on the aggregate effects of SMEs sub sector on poverty reduction and economic growth. The studies failed to look at the roles of different types of small business. Okpara (2011) carried out a study on the factors affecting small businesses in Nigeria The study focused on the aggregate effects without taking into consideration different classes and nature of enterprises. Most previous studies ignored the fact that micro, small and medium have different features which could affect their respective roles in economic growth and poverty alleviation, hence this study.

3 THEORETICAL FRAMEWORK
The Keynesian theory of income determination in a closed economy is used to model the relationship between SMEs development and poverty alleviation. The theory attempts to explain how the level of income and output is determined in a capitalist economy.

Given some assumptions the equilibrium level of income can be determined by the equality of aggregate demand and aggregate supply or by equality of savings and investment. It is shown by the following identities:
$Y \equiv C + I$. …………………………………………………………3.1

Disposable personal income $Y_d \equiv C+S$. …………………………...3.2
But $Y \equiv Y_d$ …………………………..……………………………3.3
and
Therefore $C+I \equiv C+S$ or $I=S$…………………………………...3.4

Based on this framework, SMEs role in poverty alleviation is model developed in line with a model developed by Asia Development Bank (2005). The model assumed that consumption expenditure can serve as proxy for poverty against which we regressed with certain respondents' socio-economic variables. This specification followed Adeyeye (2003). Consumption assumed to be inversely related to poverty. Any parameter that will increase consumption will alleviate poverty. Thus, the model included those variables that impact upon consumption of respondents in the study area. Most of the explanatory variables are derived from the consumption function. The Keynesian theory in macroeconomics known as the Absolute Income hypothesis implied that current real disposable income is the most important determinant of consumption in the short run (Riley, 1999).Disposable Income (Y_d) = gross income − (deductions from direct taxation + benefits). The standard Keynesian function is written as follows:
$C=a+c \ Y_d$…………………………………………….3.5

Where, C= Consumers Expenditure a= Autonomous consumption. This is the level of consumption that would take place even if income was zero. If an individual's income fell to zero some of his existing spending could be sustained by using savings. This is also known as dis-saving. Short-run studies of the consumption function suggest that a is positive. The c is called the marginal propensity to consume (MPC). This is the change in consumption resulting from a small change in income (MPC = dC/dY). Simply, it is the percentage of each additional naira earned that will be spent.

4 RESEARCH METHODOLOGY

4.1 Study Area
Ekiti State is situated entirely within the tropics. It is located between longitudes $4^0 \ 5^1$ and $5^0 \ 45^1$ East of the Greenwich meridian and latitudes $7^0 \ 15^1$ and $8^0 \ 5^1$ north of the Equator. It lies south of Kwara and Kogi State, East of Osun State and bounded by Ondo State in the East and in the south. Ekiti State has 16 Local Government Councils. The 2006 population census by the National Population Commission put the population of Ekiti State at 2,384,212 people with the capital located at Ado-Ekiti.An important feature of the state is the large number of hills it possesses, which are often the site of towns in which much of the population resides. In fact, the word 'Ekiti' was derived from the local term for hill.The state was chosen because it is one of the least developed states in the country with sizeable number of micro and small firms.The state is a true representation of emerging economy where we have large unemployed rural and urban labour force.

4.2 Population, Sampling Procedure and Size
The target population is all registered small and medium scale businesses in Ekiti State, Nigeria. The number of questionnaires administered was based on the number of SMEs that were identified in the local governments selected for the survey. Such SMEs in each local government was first identified and 50 percent of SMEs in each Local Governments were sampled using systematic random sampling procedure.

The sample size adopted for the questionnaires was 75. These constitute 6% of the entire sample frame. The sample size is adjudged suitable and adequate especially since the sample frame is relatively small.

4.3 Methods of Data Collection

The questionnaires have five sections with socio-demographic profile in section A, Businesses Characteristics of the SMEs in Section B, Information on changes in income generation and consumption patterns as measures of poverty incidences among the SMEs Owners in Section C, Contribution of SMEs to Poverty Reduction in Section D, factors influencing of SMEs capacity to generate income and create jobs in Section E. The data collected are analysed using appropriate descriptive statistics and inferential techniques.

The sampling frame for the survey consists of SMEs which employ not more than 10 for micro, between 10–50 people for small firms and between 51–250 for medium firms. Since not all the SMEs are formally registered with government and even trade associations, the population size cannot be exactly pre-determined. The sample SMEs are selected based on the following criteria:

(i) SMEs employing between ten to 50 people is considered as Small Scale Enterprise (SSEs) while Firms employing not more than 250 full –time employees is considered as Medium Scale Enterprise (MEs).Enterprises employing less than 10 people are micros. This criterion was in line with methods adopted by other studies in the literature (such as Al-ashi (1990) who carried out a research on small businesses performance.

(ii) Access to the business profiles of these SSEs (name, address, ownership details, type of business, employment data and date of formation were readily available). These profiles would facilitate the process of identifying and selecting the appropriate sample SMEs. Firms are privately owned by their management who have all decision-making rights.

To ensure that the SMEs selected were evenly distributed and all facets of SMEs were included, five local governments with the highest concentration of SMEs were identified and selected.

4.4 Variables description

The questionnaires were used to collect data on two sets of variables. The first sets of variables were used to assess the role of small scale businesses in poverty alleviation, some core variables were examined. These variables were: Entrepreneurs' sources of disposable income (ranked according to importance), Income generation in terms of profit margins, according to income generation in term of salaries and wages and employment generation. Respondents were asked to estimate their monthly revenues and costs, from which their profit margins are calculated. The guiding principles for this part of the analysis are the levels of income that are perceived by respondents to be poverty reducing. The second sets of variables were used to analyse the critical factors influencing the ability of Small Scale business to contribute to poverty reduction and alleviation. The critical factors identified include owner's sex, education, motivation, for starting their businesses, activities undertaken before establishing their current business, sources of initial capital, and technology being used.

4.5 Analytical Technique

The role of small and medium businesses in poverty alleviation was analyzed using descriptive statistics and econometric techniques such as regressions.

4.6   Model specification

The analysis of the constraints to capacity of SMEs to alleviate poverty was examined by estimating a Probit model. The model regresses with the probability of whether SMEs is able to alleviate poverty on a set of both economic and non economic factors. These model variables have been identified as growth determinants of firms (and thus determinants of employment growth). These include the characteristics of business owners such as ownership structure, level of education, activities undertaken before establishing their current business, motivation for starting businesses, sources of initial capital, and the types of technology used.

Theoretically, the explanatory variables in the model are expected to affect the output of small and medium scale enterprises. In addition to these variables, studies on SMEs generally, especially those that used primary data, had added several other variables to the models. Such variables are Business size, Owner/manager's age, Owner/manager's training, and Sources of funds. Probit regression was used to develop the predictive models for whether performance improves or not. The probit model is a simple approximation to other probability model. The probit model is known to produce statistically sound results. The model is also known to produce results that can be easily interpreted and the method is simple to analyse in economics applications. Furthermore probits model is one of the most popular binary response model used in empirical analysis. The probit model for this study is specified as follows:

$$y = \alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \alpha_3 x_3 + \alpha_4 x_4 + \alpha_5 x_5 + \alpha_6 x_6 + \alpha_7 x_7 + \alpha_8 x_8 + \alpha_9 9 + e_1 \dots 3.1$$

In a more compact form, equation (3.1) can be re-written as

$$y_i = \sum_i^n \alpha_i x_i + e_i \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 3.2$$

Where:
y_i = Poverty measures (profit, tuurover, owner,s satisfaction,). If the probability of making profit is high, 1 and otherwise, 0.
x_1 = Age (years); 1 for above 5 years and 0 for otherwise
x_2 = Gender; 1 for male and 0 for female
x_3 = Education; 1 for post secondary and 0 for otherwise
x_4 = Source of start up capital (N); 1 for personal and 0 for otherwise
x_5= Sources of raw material; 1 for local and 0 for imported
x_6 = Business size; 1 for micro and 0 for otherwise
x_7 = Business Registration; 1 for registered and 0 for otherwise
x_8 = Nature of factor Intensity, 1 for Labour intensive, 0, otherwise
x_9 = Nature of Business, 1 for trading, 0, otherwise
α_0= Constant (A);
α_i = Regression Coefficients;
e_i = Error term.

5   RESULTS AND DISCUSSION

5.1   Characteristics of SMEs

5.1.1   Nature of Business

By nature of business, five major business lines were predominant in Ekiti state. These are agro-allied business, trading, light manufacturing, transports and Vocational and professional service providers. Among these five lines of business, trading is the most common form of

business that the SMEs engaged in (39%)). This is followed by Light Manufacturing, (22%) and Vocational and professional services providers (20%). The least is transport business while a substantial proportion (17%) also engaged in agro-allied business. The low proportion of transport business was because most of the transport owners do not consider themselves as part of the trade association. They have their Union -National Union of Road Transport Workers (NURTW), which was not the focus of this research. Expectedly, the trading business remained the dominant business. This is a reflection of the Nigerian economy that is more of consumer state

5.1.2 The size of Business

The SMEs were also classified into three, according to the number of the employees. Those SMEs with less than 10 workers are regarded as microenterprises, those with not more than 50 workers are the small scale enterprises and the SMEs with above 50 workers but below 250 are called the medium enterprises. The findings showed that the majority (75%) of SMEs operation were microenterprises with less than 10 workers. The proportion of the small scale business is (19%) while medium scale was only (6%). There are two reasons for such a pattern, the cost of establishing the bigger business may be enormous and out of reach of most of the potential owners. Secondly, the high incidence of poverty among the peoples had hindered their ability to engage in large scale business enterprises.

5.1.3 Ownership Structure

The distribution of respondents by the ownership structure shows that the bulk of the enterprise (73%) is one- man business. Twelve percent of the SMEs businesses were family joint business while (11%) are owned by different people who are not from the same family. Four percent of the respondents claimed that their businesses were owned by friends.

5.1.4 Year of Operation

It is a generally held view in the literature that most SMEs collapse within five years of establishment. This proposition was also factored into the information collected from the respondents by asking for the years of establishment of their businesses. Most of the businesses 63% were established within the last five years. Twenty-two percent of the SMEs were established within the last ten years while only 15% had been in operation for more than 10 years. Though, it could be said that the proportion of business that fall below five years are higher, the fact that a sizeable number of the businesses are older than five years implies that the survival rate of the SMEs business in the Southwestern part of Nigeria is high and improving. The distribution pattern also shows that two out of every five SMEs in the southwestern will survive more than five years and at least two of every ten survive above ten years.

5.2 Economic Profile of SMEs in Ekiti State, Nigeria

The SMEs ability to generate income and employment thereby contributing to reduction in poverty level and incidence as well as its prevalence depends on the performance of the SMEs in terms of income, employment, sales, profitability and growth potential. To determine these parameters and then juxtapose them with the indicators of poverty reduction, this section explores some of the possible sources of the strength of SMEs to generate income and employment. These factors are divided into two categories: Those factors that relate to the sources of input and material that are used in the production of goods by the SMEs while those that relate to the changes in sales and profitability of the business. These two sets of

factors determine SMEs performance. The SMEs owners who were the respondents in this survey were asked to respond to questions relating to these issues.

5.2.1 Changes in the Well Being of the SMEs Owners

As the majority of small businesses owners were not involved in other income-generating activities, the estimated profit margins represent a better proxy for the disposable income of surveyed entrepreneurs. The respondents were also requested to comment on their profitability trend since the start of their businesses up the time of interview. On the average all the SMEs had an average profit of N60, 000 per month, however, the Medium scale business still remained the most profitable followed by the Small and Micros. This implies that size of the SMEs enhances the profitability potential of businesses.

 The lower profits for Micros were attributed to the lower scale of their business operations as evidenced by low investment capital (the majority of respondents, as discussed earlier), established small businesses due to a lack of other employment opportunities. The overall average profit margin for all the SMEs was estimated at Naira 60,000 per month, which was higher than the average salary in the manufacturing industry which stood atN40,750. The results conform to the occupational choices models, which describe how individuals decide to become entrepreneurs by comparing the wage they can earn from other employment with the entrepreneurial rent they can obtain by managing their own businesses. Opting for alternative self employment will lead to a high probability of earning more than maximum salary in the labour market given that the majority of entrepreneurs even have higher educational qualification. Two observations can be made here on the role of small business on poverty alleviation. The majority of surveyed businesses generated income above poverty lines; and most of the owners were not engaged in other income generating activities. In view of these findings, removing obstacles that limit vertical growth may be more poverty alleviating than policy initiative that emphasize horizontal growth which focuses on high number of the new firms springing up on regular basis. Vertical growth focuses on the survival of existing firms and emphases the growth in size.

5.2.2 Profitability Trends relative to Employment Growth

Entrepreneurs were then asked to comment on their business profit trends' from when the business started to the time of the interview.. The results indicate that 50% of respondents generated more profit over time, with no major differences in findings based on the firm's size. However, small enterprises (22%) indicated no change in profitability compared to (19%) of Micro enterprises. To determine the relationship between profit trends and employment growth, profitability trends were cross-tabulated with data on employment growth. The analysis also showed that, income from small businesses contributes to poverty alleviation. In this case, the hypothesis that small businesses have a role to play in poverty alleviation is accepted. Furthermore, the capability of small businesses to generate employment opportunities is high. In addition, a substantial proportion of firms which started as micros had managed to graduate to SSEs.

5.3 Empirical Results to Determine the Contribution of SMEs to Poverty Alleviation

The variables in the poverty models for Micro enterprises, Small scale enterprise, medium enterprises and the pooled results respectively explained 56%, 53%, 52% and 75% per cent of the variability in poverty among each category. Four variables were significant in microenterprises and small scale enterprises while only two were significant in medium scale enterprises and seven variables in the pooled models respectively. The four variables that

were significant in the microenterprise were Age of the business, educational experience of the business owner, Income of business owner and location of the firm. The variables had positive coefficient and conform to theoretical expectations. The positive coefficient of age of business in the study (0.144) showed that the longer the business survives the more the business contribute to generated income and increase the consumption of the owner and therefore reduce the poverty severity and depth among the business owners. Educational experience is also an important factor in the living standard of the people, the more educated the business owner the more they are able to handle the business better and the more they are able to generate profit and increase their consumption and hence improve their welfare.

Table 1: Alleviation Model for SMEs Contribution to Poverty (Own Computation)

Variable	Micros Model	SSEs Model	MEs Model	Pooled Model
Constant	0.801(2.358)	1.476(4.06)	4.317(4.400)	1.564(5.497)
Age of Business	0.144(2.095)	0.043(0.611)	-0.067(-0.298)	0.068(0.740)
Age of Owner	-0.003(-0.40)	-0.205(-2.79)	0.038(0.306)	-0.024(-0.209)
Amount of Loan	-0.070(-0.925)	0.025(0.330)	-0.204(1.257)	0.218(2.242)
Asset Indices	0.039(0.574)	0.033(0.330)	-0.143(-1.072)	0.327(3.150)
Capital Invested	0.127(1.503)	0.140(1.652)	-0.275(-1.478)	-0.364(-2.866)
Educational level	0.182(2.688)	-0.038(-0.417)	0.383(3.808)	-0.063(-0.539)
Gender	-0.009(0.127)	0.433(4.343)	0.098(0.782)	0.065(0.600)
Income generated	0.411(6.110)	0.259(2.724)	0.312(2.290)	0.301(2.884)
Location of Firm	0.103(1.757)	-0.166(-2.203)	-0.065(-0.745)	-0.221(-1.980)
Poverty dummy	-0.014(-0.198)	-0.092(-1.129)	-0.481(-1.615)	-0.303(-2.855)
Social cultural	-0023(-0.376)	0.024(0.276)	0.076(0.350)	-0.149(-1.408)
Staff strength	0.013(0.219)	-0.031(-0.361)	-0.120(-0.966)	0.550(4.911)
Size of Business	-	-	-	-0.013(-0.132)
Adjusted R^2	0.564	0.527	0.523	0.749
F-value	8.339(0.0000)	9.191(0.000)	3.109(0.001)	5.610(0.000)

Figure in parenthesis are t-values

The poverty model for the medium scale enterprise performed fairly low. Only two variables were significant and these variables are Education and Income. However, the marginal propensity to consume is 30% which is within the value of other categories of the SMES. The

poverty model for the pooled data had seven significant variables. These were Loan acquired, capital invested, location of the firms, income, Poverty dummy and staff strength. Only capital invested and location were negative and did not conform to theoretical expectation. The negative values of location of the businesses suggested that big firms located in the rural areas perform better than small firms.

The marginal propensity to consume was 0.3 which is to say that an average small business owners in the area will spend 30kobo of every naira earned on consumption. It is important to note that capital invested was negative and highly significant. Thus, committing more resources to investment reduces the amount of money spent on consumption. Such investment stresses the per capita income of respondents and increase their poverty especially where such fund invested are taken from money to be used for meeting up with the daily upkeep of the family. Assets by the business owners were positive and highly significant. This implies that increase in asset index score of any respondent will increase consumption. Poverty alleviation programme in the area could aim at increasing the productive asset of the people. The dummy representing poverty dummy was positive and significant. It shows that poverty alleviation efforts of various governmental and non-governmental organizations in the area were in the right direction.

5.4 Socio-Economic Factors Influencing the Contribution of Small Scale Businesses to Poverty Alleviation

The contribution of small businesses in term of profit margin can be influenced by a number of critical factors. Some of such factors influencing profit margin were identified. The factors identified and examined in the study include the business owner's sex, education, motivations for starting their businesses, sources of initial capital and technology used. Recent empirical studies on small businesses have incorporated a gender perspective through identification of certain gender specific traits of entrepreneurs. Gender factors not only affect the performance of small businesses, but also influence the choice of business opportunities. When asked about their perceptions on the performance of their business ventures, 56% of male entrepreneurs indicated that their businesses had been more profitable, compared to only 45% of the female entrepreneurs. These results imply that male-owned enterprises possess higher potential for the profit generation compared to female-owned businesses.

5.5 Regression Analysis of Socio-Economic Factors Influencing SMEs Capacity in Poverty Alleviation

In this section, probit regression model was specified to analyze the possible factors that may influence SME's potential to alleviate poverty. The results for both Income and employment generation are presented in Table 2. The variables used were as defined in chapter three under the methodology and the definition of the symbols is provided under Table 2.

The findings showed that Age of the business has negative and insignificant effect on the capacity of the SMEs to generate income. The drive to success is higher in new entrepreneur and they are ready to do everything possible to promote the business than market pricing, aggressive marketing, after sales services and many others. The urge to create their own set of customers and to also be a big player in the market makes them to want to achieve greater performance. As they also become contented with their new status and business owners and they have moved from poor to relatively rich, the urge slows down and the ability to drive the business reduces and profit and income fall to an average level. Also the fact that most of the

business owners were either unemployed, retrenched, retired or had no stable source of income made them to be more aggressive than the existing business owners.

However, the results of estimation of employment generation show that age of the business is positive and significant. This is in line with a prior theoretical expectation. The result shows that the older the age of the business the higher the number of jobs and employment it will generate. Theoretically, there is a level of employment at which diseconomies of scale set in. At this stage, addition to employment of labour to fixed capital equipment leads to reduction in productivity and diminishing returns will set in. Since most of the firms hardly watch out for this level then there is a tendency for most of the firms who were more interested in growing the size of their business to end up in reducing their capacity to generate profit.

The results of Business registration are interesting and counter intuitive. The coefficients on the Business registration are negative and significant. This suggests that registration of business was perceived as factor that may hinder the ability of the business to generate income and employment thereby contributing to poverty alleviation. Intuitively, business registration rather than hindering the promotion of SMEs; should boost their status and give them more recognition which invariably leads to higher employment and income generation. The registered business owner should be able to take up many new business opportunities that required formal registration and able also to benefit from government incentives. Thus business registration should rather serve as an incentive than disincentives to enhancing the capacity of the SMEs to employment and income generation and enhance reducing poverty incidence among the SMEs owners. One major reason for this counter intuitive result might strongly be due to the lack of adequate information about the importance of business registration. Also, the experience of some of those business owners who had attempted to register was bad. In many instances, the process of registration is cumbersome and relatively expensive. More importantly it is full of scams and also in most cases the registered business faced a lot of multiple taxations from the three tiers of government. Since those who do not register operate and get away with it, then many new and existing businesses would be discouraged to register and will perceive registration as hindrance to their business survival. The result of the business size corroborates the results on age of business. The coefficient on size is negative and significant. This implies that smaller SMEs experienced higher growth in income and employment generation. Nature of business and factor intensity were also negative and significant. This suggests that expanding the business across other business may hinder the ability of the business to generate more income and employment. The main possible reason for this could be that as the number of business increases, the ability to manage the business effectively declines. The decline in managerial ability possibly affects the income generation capacity and consequently the poverty alleviation ability of SMEs. The sources of raw material whether local or foreign had positive sign and significant effect on employment which also implies that locally sourcing of raw materials tend to alleviate poverty. The sources of finance and capital equipment had negative effects and also might hinder the capacity of SMEs to generate income and reduce poverty by the SMEs.

In general, business registration, business size, nature of business, Sources of capital are significant factors determining both income generation and employment generation potential of the SMEs. However, age of business, educational level and sources of raw material were only significant in influencing the capacity of SME to generate employment, on the other hand, nature of factor intensity, sources of finance and staff strengths were only significant in

income generation capacity of the SMEs. Therefore factors influencing SMEs contribution to poverty reduction differ across the different components of Poverty reduction measures.

Table 2: Summary of Results for the Probit Regression

Variables	Income Model			Employment model		
	Coef	Z-stat	P-value	Coef	Z-stat	P-value
Age of Business (AGE)	-0.08	-0.67	0.50	0.51	4.54	0.00***
Business Registration (BR)	-0.19	-1.79	0.07	-0.72	-5.33	0.00***
Business size(BS)	-0.52	-3.93	0.00***	-0.47	-3.90	0.00***
Education Level of owners (EDU)	0.17	1.61	0.11	0.45	2.99	0.00***
Nature of factor intensity (FOP)	-0.30	-2.44	0.01	-0.08	-0.74	0.46
Nature of Business (NOB)	-0.48	-4.42	0.00***	0.67	4.87	0.00***
Sources of raw materials (RM)	0.06	0.50	0.62	0.75	6.63	0.00***
Sources of capital Equipment (SOC)	-0.18	-1.79	0.07	0.56	4.73	0.00***
Sources of Finance (SOF)	-0.53	-4.87	0.00***	-0.06	-0.55	0.58
Staff Strength (STS)	0.51	4.39	0.00***	0.09	0.80	0.42
Constant (C)	1.06	5.37	0.00	-2.25	-8.87	0.00
McFadden R-squared	0.07			0.19		
S.D. dependent var	0.50			0.48		
Akaike info criterion	1.31			1.08		
Schwarz criterion	1.38			1.15		
Hannan-Quinn criter.	1.34			1.11		
Restr. Deviance	962.80			902.60		
LR statistic	72.19			169.95		
Prob(LR statistic)	0.00			0.00		

*** Significant at 1% level

Note: In income model, the dependent variable is the income generation capacity (in terms of profit margin and disposable income) of firms, whilst in employment model; the dependent variable is the employment creation capacity of the firms.

6 CONCLUSION

Based on the summary of the findings of this study, the participation in small and medium scale enterprise by people from Ekiti has contributed significantly to reduction in poverty incidence, prevalence and severity among the people in terms of annual per capita income, consumption and employment creation. However, the current high cost of borrowing, epileptic power supply and competition from foreign goods had remained the major challenges faced by these SMEs to contribute more to poverty reduction in the study area; lending rate may also impair outreach to the poorest of the poor in the area. Generally, savings in the area was far below the amount of business investment, thus public and private concerns need to come to the rescue of smallholders in the area by injecting funds to the area

in form of credit for business investment. There is the need to provide avenue for these business sector to be integrated into formal financial system. Young enterprising smallholders should be encouraged to save and invest in the informal economy. Increased opportunities for sound education, marketing outlets, banking facilities, good health care delivery, good infrastructure and social amenities in the area are some ways to achieve this.

The study established a pay-off between increasing socio-cultural spending to alleviate poverty and reducing same to increase current savings and found that it is better for the SMEs owners to increase such spending. Finally, all indices showed that in spite of the non conducive business environment under which most SMEs operate in Nigeria, SMEs had achieved considerable success in alleviating poverty in the area of study; thus refuting the criticisms against the programme that, it is yet to have impact, it offers illusion of a quick fix and that it gets the poor more impoverished.

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PROPOSAL FOR INSTITUTIONAL RELATIONSHIPS AMONG STAKEHOLDERS IN THE DEVELOPMENT AND SUPPORT OF SMALL AND MEDIUM ENTERPRISES IN BOSNIA AND HERZEGOVINA

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ABSTRACT
Despite the multiple significances of small and medium enterprises (SMEs) for the economic development in Bosnia and Herzegovina (BiH), the support of authorities is still missing. The circumstances that have negatively affected on the development of SMEs in BiH are numerous: lack of unified legal framework; failure to recognize the significance of development of SMEs; slowness in the processes of economic transition and privatization; the post-war emphasis on efforts to revitalize large enterprises with incidental ignorance for the SMEs. It is relevant to mention that there are two official definitions of SMEs in BiH, one applied in the Republic of Srpska and the other one being used in the Federation of Bosnia and Herzegovina. Existence of multiple levels of authority in BiH (state, entity, canton and municipality) contributed to establishment of a complex legal framework. Furthermore, this system sometimes causes not only overlaps in jurisdiction and applicability of laws, but also conflicting legal regulations. Apart from that, it frequently happens that the efforts for development of entrepreneurship include persons that do not have adequate experience, competencies and readiness to be instrumental in the development of SMEs. In this analysis will be elaborate on fundamental problems in the development of SMEs in BiH, and the effort to identify solutions to the problem of lack of systematic and institutional support in the development of SMEs. Aim of this paper is to present a proposal for structuring of relationships between institutions in BiH in order to facilitate effective support to growth and development of SMEs in BiH.

Keywords: Bosnia and Herzegovina, Development, Institutions, Small and medium enterprises

1 INTRODUCTION

The process of transition in Bosnia and Herzegovina produced significant changes in creation and establishment of the private sector, with emphasis on the relevance of development of entrepreneurship and SMEs. The significance of the small and medium enterprises for Bosnia and Herzegovina is multiple:

1. All of the following emphasize the core significance of SMEs for recovery and development of Bosnia and Herzegovina: General framework of the economic strategy for development (1999), Mid-term development strategy of BiH (2004), other cantonal strategies, signing of the European Charter for small and medium enterprises.
2. According to the last OECD report, the SMEs in BiH constitute the backbone of the economy, producing over 60% of the GDP and most of the new jobs (OECD, 2005, p. 30).
3. According to the Statistical business register (published by the Statistics Agency of BiH as the first register of this kind in BiH), SMEs constitute 99.1% of all the active enterprises in BiH.

4. SMEs are also in focus of the strategies of EBRD (European Bank for Reconstruction and Development) for the period 2010–2013.
5. Along with the EBRD, the World Bank is also actively involved in supporting the growth and development of the SMEs in BiH.

However, despite the multiple significances of the SMEs for the development of BiH, the systematic and institutional support to the development of the SMEs is still lacking.

2 PROBLEMS AND OBSTACLES IN DEVELOPMENT OF SMEs IN BIH

Most of the problems faced by the entrepreneurs in BiH are directly associated with the governmental institutions. This fact logically imposes the need for special attention to be given to the following analysis: 1. Fundamental problems in growth and development of SMEs in BiH, 2. Roles of all the levels of authority in development of SMEs in BiH.

2.1 Fundamental problems in growth and development of SMEs in BiH

For the purpose of this analysis, the following fundamental problems in growth and development of SMEs in BiH have been identified:

1. Inadequate statistical support and the problem of grey economy in in BiH
It is difficult to obtain the correct data on the state of SMEs in BiH. There are information available from the ministries, chambers of economy, and similar institutions, but they are mostly based on their estimates. This situation results in different figures even in the number of SMEs, and those discrepancies are not counted in tens but even in thousands in some instances. The analysis and research of the following official documents, also produces inconsistent data and values:

- Statistical business register of BiH;
- Project „Development of small and medium entrepreneurship in the Federation of Bosnia and Herzegovina", Federal Ministry of Development, Entrepreneurship and Trade;
- Strategy of development of SMEs in the Republic of Srpska, based on data obtained from the Pension and Disability Insurance Fund (PIO) and the Statistical Institute of the RS;
- Strategy for developments of SMEs in Bosnia and Herzegovina 2009–2011.

Even all the listed documents analyze different categories. E.g., the Statistical business register provides data for all the enterprises in BiH (although only 0,9% have over 250 employees) but the trades are not included. The project of the Federal Ministry of Development, Entrepreneurship and Trade considers only SMEs including trades. Nevertheless, the most recent information are provided in the Statistical business register. Along with the listed problems with inadequate statistical support, the closely-related problem of grey economy is also causing difficulties in determination of the state of SMEs in BiH.

2. Problems of financing of SMEs in BiH
According to the Global Competitiveness Index (GCI) BiH is rated 122nd in the list of 142 countries rated for simplicity of procedures in loan availability (Federal Institute for Programming of Development, 2011, p. 20). Analysis of the banking operations indicates a higher rate of provision of loans to citizens rather than to SMEs. Apart from this, even when they provide loans to SMEs, the banks are tendentious in providing loans to large enterprises. The practice has shown that the banks calculate higher interest rates to small and medium

enterprises, as opposed to the interest rates for their regular clients, and the banks name higher risk rate as the reason for this practice. The crediting terms are especially difficult for the entrepreneurs' beginners. On the other hand, over the past couple of years, the micro-credit organizations have been approving loans for the SMEs, particularly trades. However, the fundamental problem is that such credits are expensive (high interest rates). Absence of more acceptable terms of financing frequently represents the main hindrance in the business operations of SMEs.

3. Tax policies and administrative procedures

Tax policies and administrative procedures represent significant obstacles in the business operations of SMEs. The most recent data from 2012 (www.doingbusiness.org) provide some defeating facts: When compared with the OECD member states, every enterprise in BiH makes three times more payments to the administration (40 in BiH compared to the average 13 in the OECD states) and spends over two times more working hours working on administration of taxes (422 hours in BiH compared to 186 hours in the OECD states). Even when compared with the other countries from the region, the enterprises in BiH waste more hours working on administration of taxes than any of the neighboring countries: Macedonia (75 hours), Croatia (196 hours) or Serbia (279 hours). A special problem is recognized in the process of registration of enterprises in BiH. Unfortunately, BiH is the leading country when it comes to the number of days required for registration, enormous administrative demands, and lack of understanding for the need of the entrepreneurs. All of those defeating facts illustrate the difficult position of the SMEs in BiH. Since all those procedures, rules and policies, are directly connected with the governmental institutions, it is evident that there has not been any serious consideration given to the solving of those problems. Also, it is difficult, if not even impossible, to find an excuse for such approach.

The example of Macedonia can be used as a confirmation for the said claims. The table below provides a comparative illustration of progress made in BiH compared to Macedonia (as a similar country in transition, with positive improvements) in the procedures for registration of enterprises and business start-up:

Table 1: Starting a Business, Comparison of BiH with FYR Macedonia (World Bank, 2010 and 2012)

Indicator	2010		2012	
	Bosnia and Herzegovina	Macedonia FYR	Bosnia and Herzegovina	Macedonia FYR
Procedures (number)	12	4	11	2
Time (days)	60	4	37	2
Cost (% of income per capita)	15,8	2,5	14,9	1,9
Paid-in Min. Capital (% of income per capita)	29,8	0,0	29,1	0,0

4. Implementation of policies for development of SMEs in BiH

According to the OECD Report „SME Policy Index 2009, Progress in the Implementation of the European Charter for Small Enterprises in the Western Balkans" (Report made for 2007 and 2009, with preparation of the report for 2012 in progress) the progress made by Bosnia and Herzegovina in implementation of policies for development of SMEs in the period 2007-

2009 is as follows: BiH did not achieve progress in any out of ten areas that were included in the research (Entrepreneurship education and training, Cheaper and faster start-up, Better legislation and regulation, Availability of skills, Improving online access, Getting more out of the Single Market, Taxation-Access to finance, Strengthening the technological capacity of small enterprises, E-business and Developing stronger and more effective representation of small enterprises' interests). Each of the ten areas remained at the level of 2009, i.e. 2007. The report for 2009 addresses the area of business start-up with particular criticism, providing the following conclusion: „BiH is the only country in the Western Balkans that is not implementing a systematic reform in the processes of registration of enterprises". Also, in the subject of e-business i e-governance: „BiH is the weakest of all the countries included in the research"(OECD, 2009, pp. 202–205).

5. Complexity and conditional relationships between authorities' in BiH
Apart from creating legal framework, the State should use its economic policies to create an environment that will foster successful growth and development of the SMEs. The level of undertaking in that direction depends on the ruling structures and their systems of values. It is the complexity and mutual conditional relationships between authorities in BiH that pose the main problem and the main obstruction in the development of the SMEs, and those issues will be separately addressed in the next chapter.

2.2   Roles of all the levels of government in development of SMEs in BiH
In order to completely comprehend the roles of authorities in development of SMEs in BiH, their mutual complexity and terms of interaction, the following scheme of legislative and executive bodies in BiH should be considered.
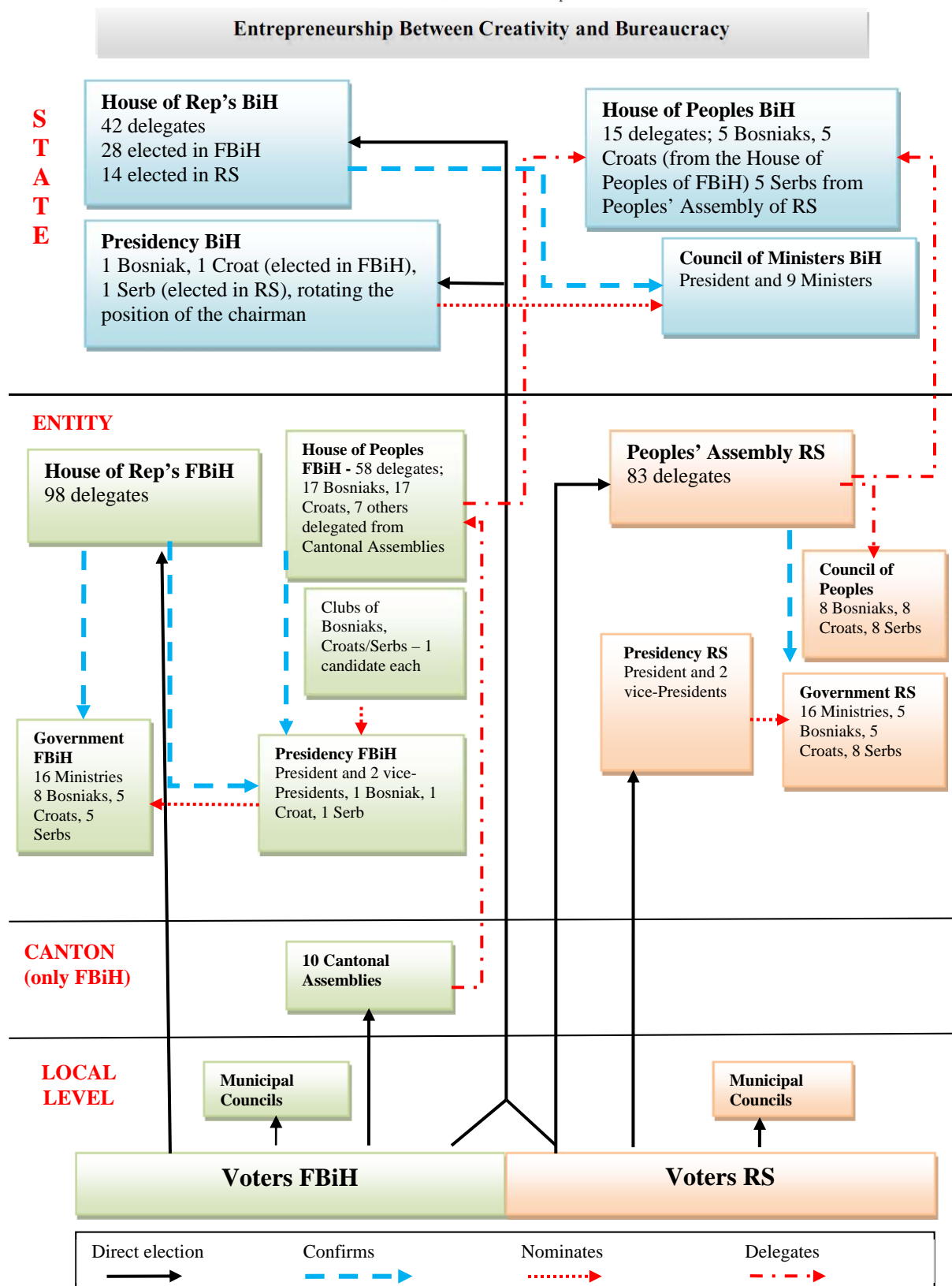
Entrepreneurship Between Creativity and Bureaucracy

Figure 1: Diagram of legislative and executive bodies in BiH (EBRD, p. 26)

The schematic layout clearly illustrates the complexity of the decision-making process at the state level, that is based on a complex system of leverage, constructed to protect the interests the three constitutional peoples (Bosniaks, Croats and Serbs). Furthermore, those are the peoples that were in a war against each other not so long ago. An additional complication is

the political stage dominated by ethnic political parties. Under the disguise of "protection of national interests" any serious engagement in solving of the economic problems is still missing, and the same applies when speaking of any serious approaches to stimulation of development of SMEs in BiH.

Bosnia and Herzegovina lacks the necessary legal and institutional framework of state-level support for the development of SMEs. Such framework should include the following: Law on SMEs, Strategy of Development of SMEs, Agency for SMEs and a Fund for SMEs. From the listed elements, BiH only has the Strategy of Development of SMEs that was adopted only in 2009 although the first proposal was prepared in 2005. This is to say that despite the evident multiple significance of development of SMEs, the support of the government is still lacking. Lack of a universal legal framework, failure to recognize the significance of development of SMEs, slowness in the process of economic transition, post-war emphasis and efforts on revival of large enterprises while ignoring SMEs – all those are circumstances that have negatively affected development of SMEs in BiH. For eventual acceptance of SMEs as an element in the development of the country, a credit is to be given to the influence of international institutions and successful accomplishments of domestic entrepreneurs.

At the level of Bosnia and Herzegovina, the sector of SMEs is governed by the Ministry of Foreign Trade and Economic Relations. Within that Ministry exists a Sector for economic Development and Entrepreneurship that includes a special Department for Entrepreneurship.

Competencies for SMEs in FBiH are governed by the Law on Incitement of Development of Small Entrepreneurship (Official Gazette FBiH, No. 19/06). According to that Law, the parties charged with program of development of SMEs are:
1. Government of FBiH and Cantonal governments
2. Federal Ministry of Development, Entrepreneurship and Trade
3. Respective Federal and Cantonal ministries and institutions, and
4. Local self-governance units

At the level of FBiH the problems of SMEs are in the jurisdiction of the Federal Ministry of Development, Entrepreneurship and Trade. At the Cantonal level (only in FBiH) the bodies that perform professional and administrative services, also relevant for the SMEs, are in the jurisdiction of respective Ministries of Economy, with the following exceptions:
1. Posavina Canton – Ministry of Economy and Physical Planning.
2. Tuzla Canton – Ministry of Development and Entrepreneurship (Department for entrepreneurship and trade), Ministry of Reconstruction, Development and Return (development and incitement of entrepreneurship, especially trades), and the Ministry of Commerce, Tourism and Traffic (Department for Commerce and Tourism).

In the RS, within the Ministry of Industry, Energy and Mining, there is an Assistant to the Minister responsible for development of SMEs and entrepreneurship. At the lower administrative levels (municipalities) there are also departments or persons responsible for promotion, growth and development of the SMEs.

Nevertheless, without a universal state-level legal framework, this enormous and frequently contradictory system of competencies and responsibilities of institutions can hardly contribute to the development of entrepreneurship and the SMEs. Also, it occurs rather frequently that

any efforts for the development of the SMEs involve individuals without adequate experience, competencies and readiness to assist the process of development of the SMEs.

3   PROPOSAL OF AN INSTITUTIONAL SOLUTION FOR DEVELOPMENT OF THE SMEs IN BIH

However, with consideration for the proposals outlined in the Strategy of Development of SMEs in BiH 2009–2011 and the existing structure of legislative and executive authorities in BiH, the authors proposes the following schematic layout of institutional relationships:
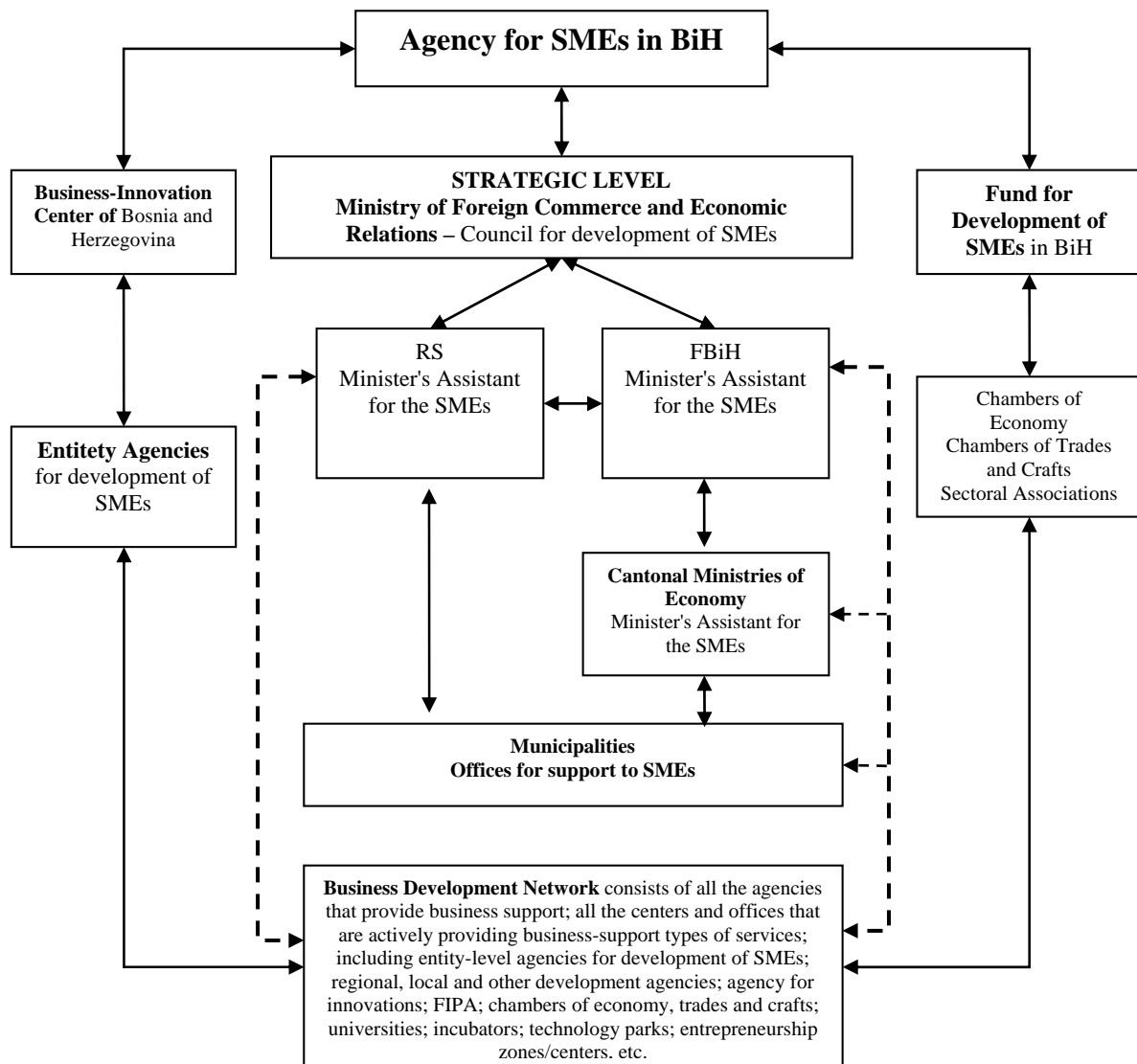

Figure 2: Proposed institutional relationships between stakeholders in development and support for the SMEs in BiH

The central position in the schematic layout is given to the Agency for Development of SMEs in BiH that should be responsible for strategies, plans (especially the urgent adoption of a an action plan for development of SMEs in BiH), but also lobbying for adoption and implementation of laws that concern development of the SMEs at the state level (especially

the Law on SMEs, and the Law on State Aid). Particular start-up efforts the Agency should make in the processes of registration of enterprises (taking a positive example of a successful reform implemented in Albania). A strategic level of support for the development of SMEs in BiH is required for the two main reasons:

1. Bosnia and Herzegovina still does not dispose with a significant, or even the required capacities for a strong development of SMEs
2. Taking into consideration the said circumstances in BiH, the ongoing process of globalization, and the openness of economy of this country; Bosnia and Herzegovina must not allow the "luxury" of dispersion of knowledge, capital and evidently "expensive" business.

So, the Agency would represent a key institution in development of the SMEs in BiH. The Agency would make strategic plans on distribution of financial support for the SMEs (with particular consideration for the types of business), which would ensure to avoid the practices of lump-sum support and uncoordinated support. The Law on State Aid should serve as a basis for a transparent distribution of financial incentives to the enterprises. The Agency would be responsible to the Government of BiH, i.e. directly to the Ministry of Foreign Commerce and Economic Relations.

The Council for Development and Entrepreneurship of SMEs, within the Ministry, monitors and supervises the work of the Agency, collects information from respective entity and cantonal ministries. The Council would have a rather coordinating role between the ministries and the Agency.

Business Innovation center of BiH should be established by the Government of BiH. The Center would have a central role in development and promotion of innovation and technical/technology system. The primary goal of the Center should be incitement of innovations, recognizing potentials in inovative ideas, and support to materialization of those ideas. The Center would also be in charge of the EU funds.

Entity agencies for development of the SMEs would be responsible for implementation of measures associated with provision of business services, trainings, educations, etc., in accordance with the plans prepared by the Agency for MSE in BiH. Entity agencies would cooperate directly with universities and secondary schools, with the primary aim of promotion of entrepreneurship and entrepreneurial spirit in those institutions. Also, they would take on the commitment to participate in the financing of education of entrepreneurs.

The primary task of the Fund for Development of SMEs should be financial mediation, and support to entrepreneurs to overcome difficulties associated with liquidity, and facilitating easier access to funding for development of SMEs (primarily beginners).

In that way, the established Network for business development (the network of support to development of SMEs) would also function efficiently and at its full capacity.

The proposed scheme of institutional relationships would resolve the obligation of the two-way vertical coordination between all the levels of authority in BiH, and also the necessary horizontal coordination and collaboration at the entity level. Such created support mechanism should result in creation of entrepreneurial climate where the entrepreneurial initiative will be rewarded, appreciated and spurred, in ways that will provide incentives and the necessary

skills to the entrepreneurs, and also promote awareness of advantages and benefits of entrepreneurship. The ultimate goal of the proposed institutional relationships would be to awaken the sleepy attitude of BiH towards private initiatives, bearing in mind the fact that one part of the country's legislation and citizens' mindset rests on models inherited from former Yugoslavia, i.e. the former system of socialism. The goal will be achieved when the entrepreneurial ideas and undertakings receive support and become fully recognized as generators of absolutely required new jobs, investment and innovations in Bosnia and Herzegovina.

4   CONSLUSION

Bosnia and Herzegovina is a country consisting of two entities, Federation of Bosnia and Herzegovina, and the Republic of Srpska, and Brcko District as a special territorial unit. BiH is a relatively small country in the region with open economy. The process of transition in BiH (with the ultimate goal of democratization and development of Western-European type of market economy) represents a rather difficult path for this country followed by series of problems such as: inappropriately implemented privatization; split markets and diversified legal regulations; insufficient development of the financial market; lack of universal implementation of crucial economic reforms. An additional aggravating circumstance is the complexity and mutual conditional relationships between legislative and executive authorities in BiH. In such a tangled network of relationships, unscrupulous and arrogant politicians, working under the disguise of protection of vital national interests, any serious engagements in solving of the burning economic problems yet remain to be seen. Also, regardless of the multiple significances of the SMEs, the system of incitement for development of the SMEs sector in BiH is almost non-existent in the true sense of the word. The necessary legal and institutional state-level framework for support to the development of the SMEs does not exist.

This paper presents a schematic illustration of institutional relationships between actors in development and support for the SMEs in BiH, which has the purpose to identify the strategic level of support for development of the SMEs in BiH. The proposed scheme of institutional relationships would resolve the obligation of the two-way vertical coordination between all the levels of authority in BiH, and also the necessary horizontal coordination and collaboration at the entity level. The ultimate goal is incitement, development and imposing of the entrepreneurial mindset, which will be instrumental in bridging of the gaps in development that resulted from dissolution of large enterprises from the former system of socialism. This will be achieved by raising the institutional support to SMEs to a higher strategic level, where the SMEs will be considered as the generators of the absolutely required new jobs, investments and innovations in Bosnia and Herzegovina.

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AGE MANAGEMENT IN ALBANIAN SMEs

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ABSTRACT
Age management is at the heart of the EU policy agenda. The changes in the world of work and the labour market are having a strong effect on human resources policies. Proactive measures are being taken by Member States to maximise employment levels, both amongst the young and older generations. The package of measures includes, for example, active labour market policy with integration programmes for the unemployed, intensification of education and training, improving occupational health and safety, programmes to enable the compatibility of work and family life, enhancement of equal rights and equal opportunities, creation of child care facilities, improving the care of sick and disabled people. Age management should therefore create a friendly environment for older workers and create opportunities for those who want to remain longer within the labour market. The aim of the paper is to encourage the development of the lack of knowledge about age management that exists in the Albanian SMEs and to present recommendation for both policy-makers and enterprises. Innovation and the correct knowledge and experience transmission are basic inside the companies. All this makes necessary to validate and formalize this learning to make the oldest workers leave their defensive position and to favour their professional development, and therefore develop their employability encouraging the integration of the young generation in the Albanian company. From this point of view, encouraging the experienced (the older) workers' participation in the evolution of the SMEs and favouring the integration of the new ones becomes a requirement to achieve the effective competitiveness in companies. This analysis has been carried out through secondary sources, as well as by interviews with industrial companies from different fields.

Keywords: Age management, Albania, SMEs

1 INTRODUCTION

The world of work is changing. The changes in the world of work and the labour market are having a strong effect on human resources policies. Europe's demographic situation is characterised by a growing proportion of older people has, over the last decade, emerged as a central priority for policymakers in the EU. This demographic shift calls into question both the sustainability of pension systems and the future of Europe's labour supply, which in turn raises questions about the prospects for economic growth (European Foundation for the Improvement of Living and Working Conditions, 2008). Age management is on the tip of the 'European tongue', however one commonly accepted definition of this term is difficult to find. It is employed in a variety of contexts and refers to a broad range of issues and

measures. It is also ideologically linked to a number of other terms and concepts - *ageing population, demographic change or ageing, active ageing, management of all ages, diversity management, anti-discrimination*, to name just a few (European Commission, 2007). Despite there being no single definition of age management, there seems to be a common consensus as to what is implied by the term and its other related concepts. Proactive measures are being taken by Member States to maximise employment levels, both amongst the young and older generations. The package of measures includes, for example, active labour market policy with integration programmes for the unemployed, intensification of education and training, improving occupational health and safety, programmes to enable the compatibility of work and family life, enhancement of equal rights and equal opportunities, creation of child care facilities, improving the care of sick and disabled people. Age management should therefore create a friendly environment for older workers and create opportunities for those who want to remain longer within the labour market. The effects of population aging are not only present macroeconomic but also are more and more approached by individual and enterprise levels.

In Albania, the development of policies and practices aimed at improving opportunities for older people have grown significantly in recent years. Nonetheless, the statistics show that the situation has not changed significantly. The impact of ageist attitudes can be seen in the low levels of employment of older people. The employers in Albania are still reluctant to employ older workers because they are told to be inflexible, slow, unhealthy, low-performing or with out-dated knowledge. New approaches, policies and instruments which are so-called age management are not accommodate to the specific situation of the ageing workforce in such a way that to provide incentives and support individuals to be able to achieve their potential without being disadvantaged by their age.

This paper seeks to encourage the development of the lack of knowledge about age management that exists in the Albanian SMEs and to present recommendation for both policy-makers and enterprises.

2   THE OLDER WORKER ON ALBANIAN LABOUR MARKET
Albania has an ageing workforce with labour force participation declining with age (table 1); especially after age 55.

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Table 1: Activity rates[1] by age and gender, 2007–08 (European Training Foundation, 2010)

%	2007			2008		
	Total	Male	Female	Total	Male	Female
15–64	65.2	74.4	56.2	61.9	72.1	52.8
15–24	39.8	44.9	34.7	33.1	37.8	28.7
25–34	78.4	89.1	68.6	71.5	86.9	60.4
35–44	83.4	93.0	74.5	82.1	91.4	74.9
45–54	80.3	90.4	69.9	79.0	89.1	69.2
55–64	50.7	67.5	33.3	48.0	67.9	27.6

Albania's labour force participation rate for those aged 55-64 is 48.0 percent in 2008. Older workers are a significant group of the long term unemployed, the under-employed trapped in casual work, and those disengaged workers who prefer to identify as retired rather than unemployed. Older male workers (50-64 years) are at particular risk of involuntary separation from work due to redundancy/retrenchment (women are more likely to leave for family reasons, including synchronizing retirement with husbands).

Which are reasons for extremely low participation of older workers on labour market?

One reason behind the low participation of older workers can be found within the transition processes in the 1990s. Transformation period was accompanied with decline in economic activity in general and inflation, which both had negative impact on employment. Albania experienced its highest unemployment rate during 1991–1992, though it continues to be above than 10 percent (INSTAT, 2002). Labor market conditions have radically changed. Furthermore, transition has proceeded alongside a major shift in the relative demand for skill types in the market economies (Commander and Kollo, 2004). Transformation depression has increased the demands for educated employees; those without having qualifications mostly lost their jobs.

Besides transition, there are many other reasons that hinder older workers from staying active, such as (European Foundation for the Improvement of Living and Working Conditions, 2008):
- a perceived lack of flexibility and initiative;
- a poor grasp of foreign languages;
- a reluctance to take part in training;
- limited adaptability to new working conditions;
- a lack of knowledge of new technologies or production processes;
- a greater tendency towards taking sick leave.

3 AGE MANAGEMENT IN ALBANIAN ENTERPRISES

As already indicated, older workers in Albania have been disadvantaged in the labour market, mostly due to the transition from the old socialist economic model to market- oriented

[1] The proportion of the population aged 15–64 that is economically active (i.e. all people who supply labour for the production of goods and services during a specified period).

society. With a total unemployment rate above 10%, it was difficult to explain the necessity of putting older workers back in business (Borloo, 2005). Since then new institutional and legal possibilities have been adopted, however not being efficient very much in solving the problem of the employment of seniors, since the employment rate of old people remain very low.

With certain delay, Albania became aware of some problems, connected with aging workforce – more present at company level. The main drivers for initiating age management development in Albania were the impact of ageing on public expenditure and economic growth rates, underlining the need to extend working life and inevitable fact that employers will have to employ more, over-55s. In addition, some other principal reasons, such as tackling age barriers and discrimination, age management is now considered as an economic and social necessity (Malloch et al., 2011). However, the implementation of age management at company level is legging behind the most developed European countries. Unfortunately, there is limited research on what is actually being done (Farrell, 2005).

This is why this paper discusses the development of the lack of knowledge about age management that exists in the Albanian SMEs. Innovation and the correct knowledge and experience transmission are basic inside the companies. All this makes necessary to validate and formalize this learning to make the oldest workers leave their defensive position and to favour their professional development, and therefore develop their employability encouraging the integration of the young generation in the Albanian company. From this point of view, encouraging the experienced (the older) workers' participation in the evolution of the SMEs and favouring the integration of the new ones becomes a requirement to achieve the effective competitiveness in companies. This paper focuses on the role played by employers, since most decisions on how to deal with an aging workforce will have to be taken within individual organizations, or will, at least, be implemented within these organizations (Remery et al, 2003).

The drivers which make age management practices reasonable are more or less the same within European countries. One of the main reasons that force employers to combat age barriers is age discrimination, which has been called the last unrecognised discrimination, including both open and hidden forms (Walker, 1998).

The scientific evidence shows that older workers are, on average, as effective in their jobs as younger ones—though of course there are variations in performance between jobs. Older staff have fewer accidents than younger ones and are less likely to leave an organisation voluntarily (Walker, 2005). Their average net cost to an employer is similar to that of younger staff (Walker, 2005) or very often cost-benefit analysis talks in favour of older employees (Brooke, 2003). In addition there are pragmatic reasons why the social partners are beginning to look for ways of removing or reducing the impact of age barriers. Some employers have even begun to articulate a business'case in favour of older workers. Some main reasons – why tackle age barriers include (Walker, 1998):
- the age structure of the workforce is changing rapidly in all countries. That fact implies a radical change in human resource strategies and a new approach to managing age at the workplace. Future competitiveness will rest partly on the performance and productivity of ageing workforces and, therefore, on the efficient utilisation of older workers;
- at plant level employers are reassessing the consequences of early exit. It is being seen by some as a waste of experience and human resources and of the investment they

have made in the workforce. Others see roles for older workers in training younger people or in preventing skill shortages;

- there is growing awareness among employers and trade unions that, by artificially limiting the field of candidates, age barriers prevent an organisation from maximising its recruitment potential;
- some enterprises are recognising that the organisation with a diverse age base – a mixture of youth and maturity – is likely to be able to respond best to rapidly changing circumstances. In the service sector in particular, employers are seeing the benefits of adjusting the age range of their employees to better reflect the age composition of their customers;
- there are widespread government concerns about employment rates and the financing of pensions.

Especially in Albania the effect of early leaving employment has been even more present since Albania has gone through its tranzition period in which early retirements seemed to be the most elegant way of reducing employees.

This analysis has been carried out through interviews with SMEs, located mainly in the Korca Prefecture (Albania), in different business sectors. For the purpose of this study, interviews (2011) were carried out with a variety of actors: 100 interviews with the persons with responsibility for human resources development (owner, administrator, HR manager, other). The reason for this composition is based on the responsibility that those actors have on human resources development.

In the majority of the SMEs the person with responsibility for human resources development issues is the owner (44%).

3.1   Key findings
What do employers see as the major drivers of engagement for their workers over 55s?
The main reasons that HR managers have given for working on retention of their aging workers are:

- → special knowledge and experiences that older workers possess (46%);
- → the need to transfer knowledge and experience of older workers to younger (39%);
- → benefiting from older workers' characteristics – strengths, such as: having experiences, responsibility, loyalty etc. (28%); and
- → general labor shortages on the labor market (shortages of younger candidates) (10%).

Which measures are employers taking to recruit or retain older workers?

HR managers answer with the aid of proposed actions upon them the employer had to choose whether certain measure: - is being implemented; - is considered to be implemented or - would not be considered for implementation.

The results indicate that the most commonly used measures, starting with age-neutral advertisement of job vacancies (70% of SMEs are already implementing this measure), were found to be those aimed at keeping older staff with multigenerational workforce (52%), preventive medical check-up (49%), risk identification at workplace (43 %), retirement plans employees communication (45%), communicating about extending working life (51%),

identification and transformation of knowledge (47%), exemption from working overtime for older workers (50%).

What are the reasons for not being inclined to employ or retain older workers?
The main reasons for reluctance are:
→ No compelling business purpose
→ Retaining all valuable employees, regardless of their age.
→ A pressing need for more young blood
→ The nature of the work and the work environment (hard workloads, unsuitable for older workers)
→ Greater affordability of younger workers
→ Abundant supply of workers under current arrangements or even the need to reduce the staff
→ Actual and/or anticipated opposition from workers and/or managers
→ Legal obstacles

In summary, this paper suggests that employers in Albania are not taking the ageing workforce seriously and are failing to seek out and implement sufficient strategies for the retaining, retraining and recruitment of mature workers. Moreover, it is argued that Albanian employers have failed to recognise that they have a shrinking labour market despite all evidence to support this (Farrell, 2005). So, even though Albanian employers experience and/or expect labour market shortages they do not turn massively to older workers as a solution.

4 CONCLUSION
The changes in the world of work and the labour market are having a strong effect on human resources policies. In Albania, the development of policies and practices aimed at improving opportunities for older people have grown significantly in recent years. Nonetheless, the statistics show that the situation has not changed significantly. The older workers in Albania have been disadvantaged in the labour market, mostly due to the transition from the old socialist economic model to market- oriented society.

In this paper three main questions have been addressed: What do employers see as the major drivers of engagement for their workers over 55s? Which measures are employers taking to recruit or retain older workers? What are the reasons for not being inclined to employ or retain older workers? In order to answer these questions we analyzed degree to which employers implement measures or consider implementing measures aimed at retaining older staff. SMEs devote little or no effort to retaining their own older workers. HR managers are starting to familiarise themselves with the concepts, methods and tools, but only a few companies have gained some experience in this matter. Employers will have to develop more effective ways of managing their aging workforce to maintain operational continuity (Parker, 2006).

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SMALL INNOVATIVE BUSINESS DEVELOPMENT AS INDICATOR OF CHANGES IN REGIONAL INNOVATION SYSTEM

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ABSTRACT

In this paper the problems of small innovative business development in regional economy are under discussion. Here small innovative business is analyzed from the point of view of the concept of Regional Innovation System (RIS). The main goal of the paper is to analyze how the RIS of Novosibirsk region (Russia) has changed in time. Another aim is to understand what role small business plays in the RIS of Novosibirsk region. In this paper we show that by studying small innovative business development we can not only see what its part in the regional economy is but also draw conclusions on the development of the system of innovations itself. Russia is a federation with 83 regions that differ a lot in all spheres including innovation activities, and by analyzing governmental statistical data on regional dynamics we show that there are leaders and followers and there are regions where this sphere is not developed at all. Moreover, there exists certain specialization between the regions with some regions being active in creating innovations and others in using them. Novosibirsk region is one of the leaders in creating innovations. Detailed econometric analysis of the statistical indicators demonstrates that small innovative business is significant for the economy of Novosibirsk region. In this regard special attention is paid to the influence that RIS has on the small business focusing on the problems firms face in their development and their needs for the governmental support. The analysis is based on the small innovative business survey conducted in Novosibirsk region in 2009-2011 in the IEIE of SB RAS. Changes that are taking place in the RIS of Novosibirsk region during recent decades and the evolution of the system itself are discussed in the paper.

Keywords: Innovation systems, Regional development, Small innovative business

1 INTRODUCTION

Russia is a federated state with 83 regions. The regions differ in procurement of natural resources, industries, labor force structure, etc. Under these circumstances it is natural that the regions are at different level of economic development. Innovation activities also are developing differently. This is why our research is based on the concept of Regional Innovation System (RIS).

The concept of RIS is relatively new, it appeared in the early 1990s. The concept of RIS was impelled by the concept of NIS (National System of Innovation). As well the concept of NIS it is based on a similar rationale that stresses territorially based innovation system (Asheim and Gertler, 2005). "The region is increasingly the level at which innovation is produced through regional networks of innovators, local clusters and cross-fertilizing effects of research institutions" (Lundvall and Borrás, 1999, p. 39).

2 NOVOSIBIRSK REGION: REGIONAL INNOVATION SYSTEM INDICATORS

With regions of Russia being different in their innovation activities development there are a lot of discussions about how to compare regions and how to distinguish between developed

and developing ones (Untura, 2012). In any case any comparison to a great extent is based on analyzing governmental statistical data on regional dynamics. Turning to official statistical data (Khalimova, 2011) show that there are leaders and followers and there are regions where this sphere is not developed at all. Moreover, there exists certain specialization between the regions with some regions being active in creating innovations and others in using them. Novosibirsk region is one of the leaders in creating innovations.

Chart 1 gives the idea about the scale of innovation activities in Novosibirsk region, all the indicators are calculated in the prices of the year 2000.
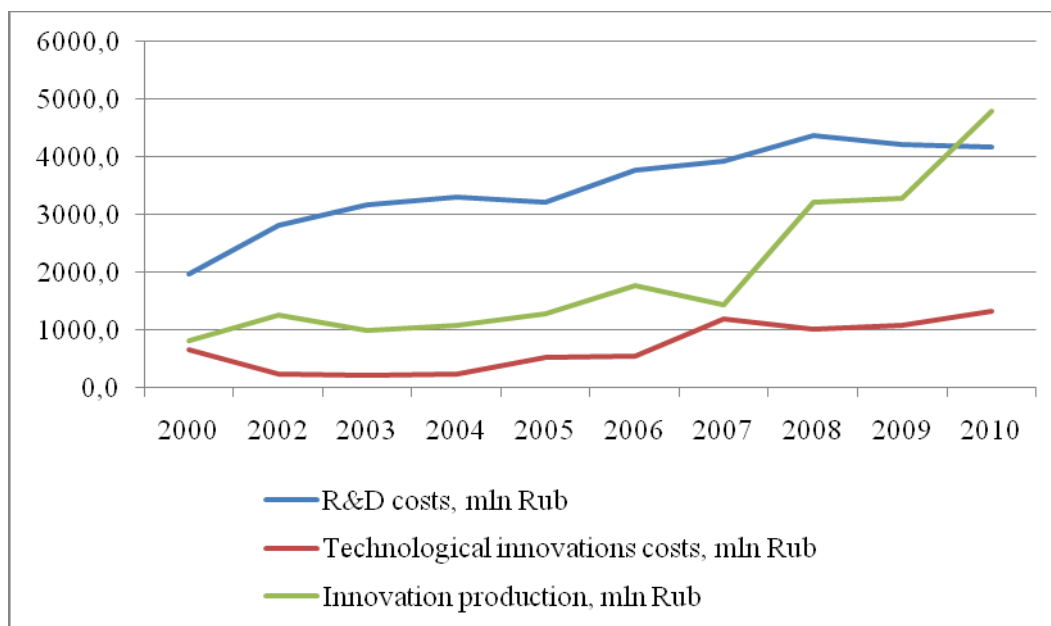

Chart 1: Novosibirsk region: RIS indicators (based on Regions of Russia, 2011)

As we can see from the graph the region spends more on the R&D (that is the indicator of creating innovations) than on technological innovations (that is the indicator of using innovations), this is why we say that the region's specialization is creating innovations. Statistical data shows that through the 2000s innovation activities have been developing greatly: we observe two times rise of both R&D and technological innovations costs and six time rise of innovation production. Hence it is intensive development and it proves that Novosibirsk region is indeed innovationally active one.

3   SMALL INNOVATIVE BUSINESS IN NOVOSIBIRSK REGION

Innovative business, especially the small one, is the central element of the system of innovations. Innovation business is the one to carry out innovation activities; innovation business is the one to promote adoption of innovations being the first to use them. In this respect the study of innovation business is extremely important for finding out the problems of functioning of the Russian innovation system (and of the RIS of Novosibirsk region in particularly) and for searching for the ways to transition towards innovative development.

This analysis is a part of a group research in the Institute of Economics and Industrial Engineering of Siberian Branch of Russian Academy of Science (IEIE of SB RAS) that is conducted since 2009 (Kravchenko et al., 2009; Kravchenko et al., 2011).

In 2009–2011 in IEIE of SB RAS small innovative business study was conducted in Novosibirsk region. The data for the study was collected through the survey of the small innovative companies; 80 managers of small innovative companies took part in the questionnaire.

In the questionnaire managers of small innovative companies were asked to rate factors that influence business development. We analyze the factors at different stages of the life cycle of business, the companies were asked to rate the factors at different stages of development: at the founding stage and at the stage of growth.

Let us give some characteristics of the sample of companies under study. 52 % of the companies are young, they were founded less than ten years ago. Half of the respondents provide services and others produce goods. The companies operate mainly in B2B market. The novelty level is high: more than half of products are new for Russian and world market. Own ideas and results of own research and development (R&D) are the main source of innovative ideas. The majority of the companies (more than 80%) are financed mostly from the firm's resources.

3.1   Small innovative business at different stages of development
All economic agents go through a number of stages of development in their life and their behavior is determined by different factors at different stages. Here we turn to the theory of life cycle of organization.

Theory of life cycle of organization uses biological idea of a life cycle to analyze development of a firm. According to it organizations are born, then they grow and finally die. In this process just as in biology certain patterns can be observed. Different authors in their models distinguish different number of stages: from three to ten. Nevertheless, there is a common understanding in literature (Shirokova, 2006) that:
- The stages are sequential;
- Every following stage is a result of the previous one.

In our analysis we distinguish between four stages of development (we use typology based on generalization of variety of approaches to define number of stages (Shirokova, 2006)):
1. Founding stage;
2. Stage of growth;
3. Stage of maturity;
4. Stage of decline/New business.

Attribution to this or that stage of development is a question that a firm should decide by itself, it is more of feeling that top-management has. Of course, there are certain characteristics necessary to every stage, however, it is almost impossible to make one general scale at what age company should be considered growing and when it is mature. A lot depends of the industry, if use biological analogy again, industries are species; and all species become mature at different ages.

It what follows we analyze the influence of the factors at two stages of development: at the founding stage and at the stage of growth.

It is obvious that mature companies rate factors and elements of the system of innovation using their experience both at the founding stage and at the stage of growth, while some of the young companies' ratings are prospective ones. That is why it is interesting to divide the whole sample into groups depending on the stage of development. The difference in ratings, on the one hand, will be the difference between expected and real influence of this or that factor, and on the other hand, it will indicate the changes in RIS since different groups of companies go through the same stages of development at different moments of time.

Thus, the sample was divided into three groups:
1. Companies at the founding stage (11 companies);
2. Companies at the stage of growth (38 companies);
3. Companies at the stage of maturity and at the stage of decline/new business (31 companies)

Companies at the founding stage rate factors at the founding stage based on their experience that is still fresh, and at the stage of growth their ratings are more speculative and theoretical. Companies going through the stage of growth know how to do business both at the founding stage and at the stage of growth, all their ratings are based on experience. Mature companies as well as companies at the stage of decline not only know how to do business both at the founding stage and at the stage of growth but also had time to analyze and systematize it, that is why these two stages of development are put into one group.

3.2 Problems and hypotheses under discussion
In this paper I focus on the problems that small innovative business faces in its development and what government can do to help business to cope with the problems. First I analyze barriers for development and then I discuss forms of governmental support.

I put forward the following *hypotheses* for the discussion in this paper:
➢ The RIS is becoming more stable and predictable; the barriers caused by uncertainty of the system are becoming lower. Different groups of companies see different barriers as the biggest obstacles for development, with the barriers of instability being lower for young companies.
➢ When growing business becomes stronger and needs less support from the government. At the stage of growth the barriers are lower and support becomes less important comparing to the founding stage.
➢ Governmental support is called to reduce the biggest obstacles that small innovative business can confront. The most desirable forms of support are those that are aimed to fight against the highest barriers for development.

4 SMALL INNOVATIVE BUSINESS DEVELOPMENT AS AN INDICATOR OF CHANGES IN RIS

4.1 Barriers for development
Small innovative business as other economic agents faces various barriers for development in its activities. These barriers that create obstacles for successful development are an integral part of economic environment. This problem is widely discussed in literature, with factors of external and internal environment being considered (Molz, Tabbaa and Totskaya, 2009; Index OPORY, 2007–2008). On the one hand, there are internal barriers created by nature of small

innovative business, and any company finds them in their way of development. On the other hand, there are external barriers that are attributes of particular system of innovation.

Here we consider such barriers as *cash shortages, shortage of qualified staff, high cost of development of the new offering, high economic risk connected with new offering, long payback period* to be the ones of the first group. They are related to the activities of the company and exist regardless of characteristics of system of innovation. The second group of factors deals with characteristics of external environment and includes institutional, organizational and financial infrastructure, governmental policy in the sphere of innovations, etc. Here we talk about such barriers as *lack of a supporting infrastructure, lack of governmental financial support, lack of legal structure for the innovation, low demand for the new offering, lack of ready market for the new offering, lack of information about the new process or product, little information about markets for the product or service, few opportunities for collaboration or cooperation with other firms and institutions*. They are created by the system of innovation itself and all the agents have to overcome these obstacles that are the same for everyone in the system.

Average ratings of barriers for development given by different groups of the small innovative companies in Novosibirsk region are shown in Chart 2 and Chart 3, with 5 standing for the most important factor and 0 standing for the least important one.
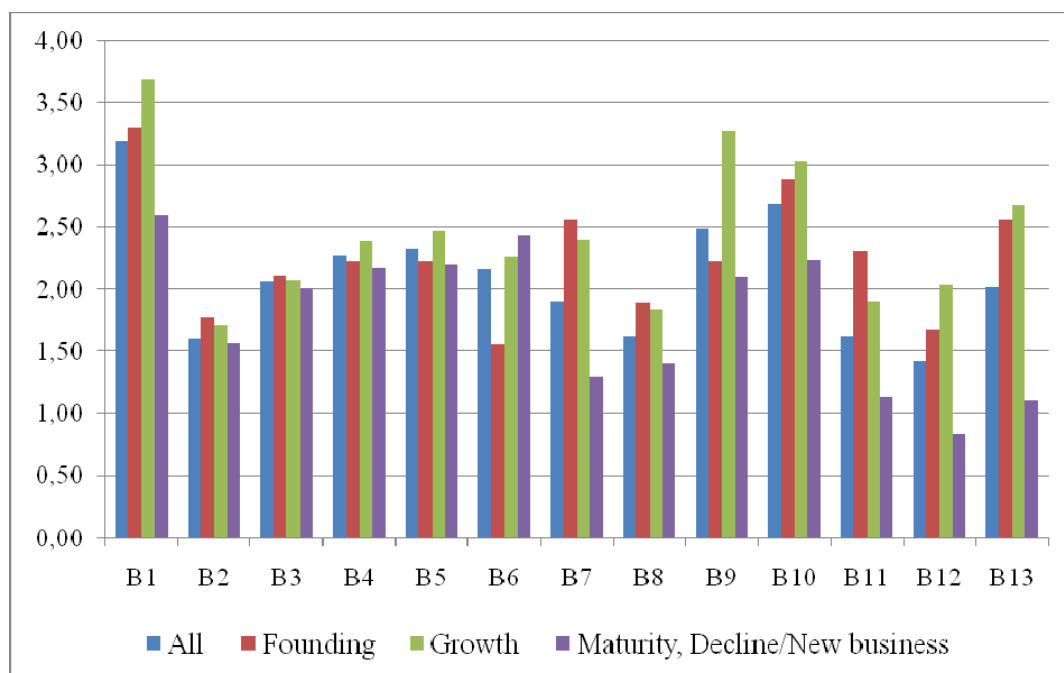

Chart 2: Barriers for development at the founding stage
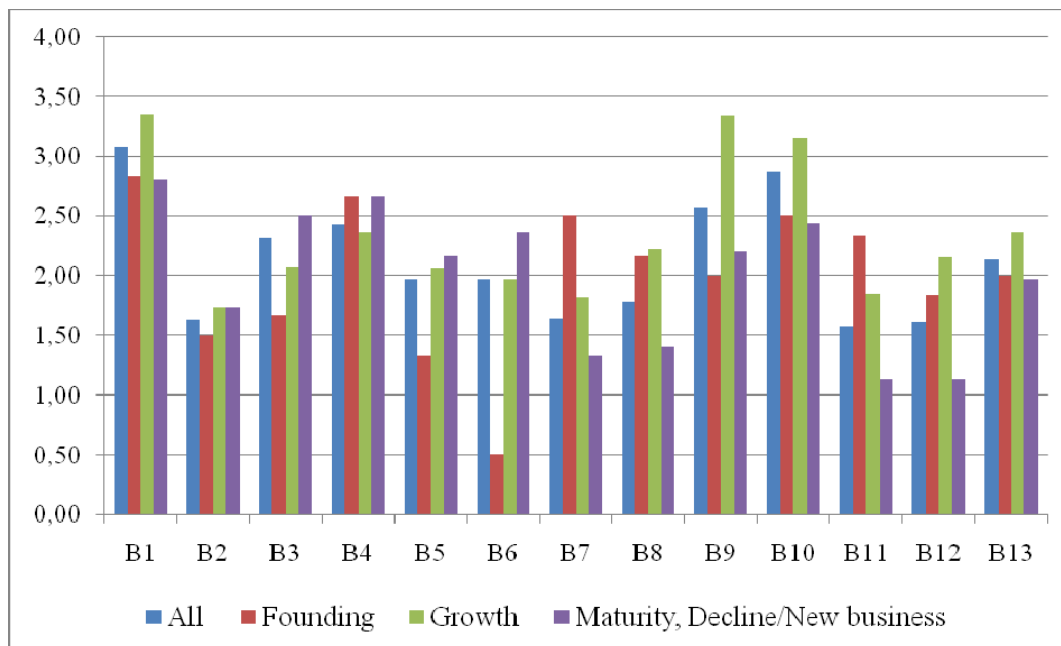
Entrepreneurship Between Creativity and Bureaucracy

Chart 3: Barriers for development at the stage of growth

Where: **B1** *Cash shortages;* **B2** *Lack of governmental financial support;* **B3** *High cost of development of the new offering;* **B4** *Low demand for the new offering;* **B5** *High economic risk connected with new offering;* **B6** *Long payback period;* **B7** *No ready market for the new offering;* **B8** *Lack of a supporting infrastructure;* **B9** *No legal structure for the innovation;* **B10** *Shortage of qualified staff;* **B11** *Lack of information about the new process or product;* **B12** *Few opportunities for collaboration or cooperation with other firms and institutions;* **B13** *Little information about markets for the product or service*

For the whole sample the most significant obstacles for business development are cash shortages (B1), shortage of qualified staff (B10) and lack of legal structure for the innovation (B9). They are considered to be barriers on every stage of development. Only one of these barriers (that is lack of legal structure for the innovation (B9)) is an external one, the other two are internal ones.

The barrier of cash shortages (B1) is the highest one for the whole sample and for each of the groups, with ratings from young and growing companies being higher at the founding stage and ratings from mature companies – at the stage of growth. This can be easily explained if we try to understand the psychology of making business. Mature companies were founded, on the average, in the second half of 1990s, while growing and young companies, on the average, appeared in 2000 and in 2008 respectively. The results that we get show that when starting a new business in the unstable economy of the 1990s companies gave less thought about their future at the beginning; while in 2000s companies had growing confidence in the future and planned what their funding sources would be not only today but also tomorrow. Thereby, the subjective level of uncertainty is lower for younger companies, which leads to lower ratings of the cash shortages at the stage of growth.

Growing companies rate the barrier of cash shortages (B1) higher than other groups. Yes, mature companies' ratings are not so high, however, we think this is the case because mature companies in general are less susceptible to the barriers (on the average they give lower

ratings comparing to other groups). On the other hand, the fact that young companies rate this barrier lower than growing ones proves that there appears more possibilities for raising funds for innovative business development in the RIS of Novosibirsk region.

As for lack of legal structure for the innovation (B9) that is significant for the whole sample the barrier is high mostly for growing firms. We take it as a proof that the RIS is becoming more clear. Growing companies needed the rules when they started and now young companies don't show this need very much which means that the rules are becoming clearer.

Long payback period (B6) is significant only for mature companies and only at the founding stage. The fact that other groups don't rate this barrier that high proves that the system is becoming more stable when one is not afraid to start new business even knowing that the payback period is long. Also, it is interesting to mention that here we see the biggest difference between the rating at the founding stage and at the stage of growth: it is observed for the group of young companies. One may think that the young companies don't have enough experience, but the managers have 14 years of working experience on the average, of course this experience may come from other sectors (since average age of a firm in the group is 3 years) so we can't call them completely inexperienced. Thus, we see one more proof that there appears stability in the RIS.

No ready market for the new offering (B7) is one the most significant obstacles for young companies both at the founding stage and at the stage of growth. No ready market for the new offering is a barrier for young companies even though the main source of innovative ideas is own ideas and results of own R&D. It means that a new pattern of starting innovation business is appearing in Novosibirsk region when the firm is built into the system from the very begining.

On the average young and growing companies rate barriers higher at the founding stage, while mature ones – at the stage of growth. We think this is the result of firms giving more thoughts about their future when they start, so planning is becoming more important for operating of small innovative business.

4.2 Forms of governmental support

The government is an important part of NSI; it determines the rules of the game. Russia is a federated state, and regional governments have power to determine the rules of the game in the region (of course, they don't contradict federal rules and regulations). Hence, regional government is an important part of RIS. One of the government's key functions is to reduce the influence of the barriers for development. The government possesses a variety of instruments to fulfill this function, one of which is governmental support of small innovative business. For the support to be efficient it is necessary to question small innovative business in what parts of the activities they need assistance.

Average ratings of forms of governmental support given by different groups of the small innovative companies in Novosibirsk region are shown in Chart 4 and Chart 5, with 5 standing for the most important factor and 0 standing for the least important one.

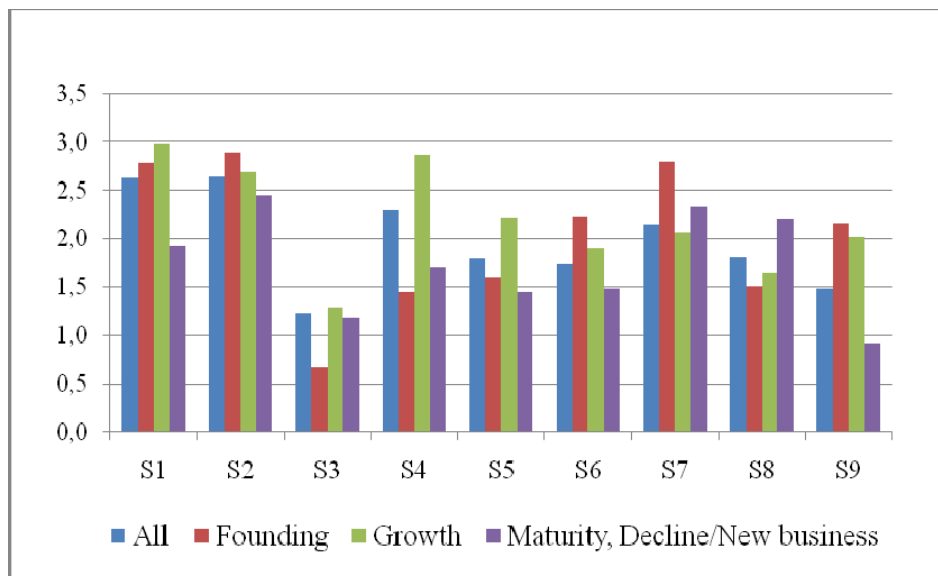**Entrepreneurship Between Creativity and Bureaucracy**

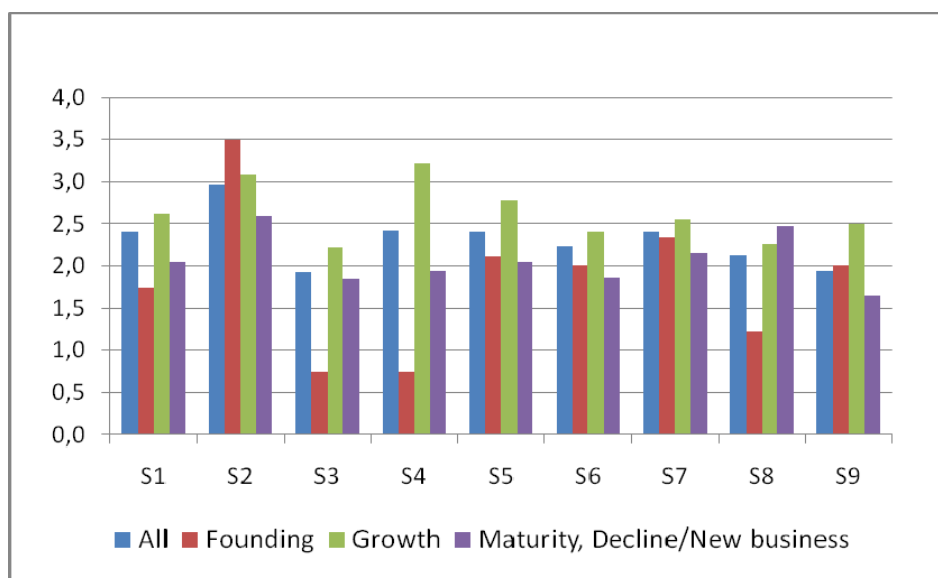*Chart 4: Forms of governmental support at the founding stage*

Chart 5: Forms of governmental support at the stage of growth

*Where: **S1** Financial support; **S2** Provision of information about markets, etc.; **S3** Creation of associations of related businesses; **S4** Instruction on business practices; **S5** Cooperation with major firms in the area; **S6** Cooperation with research and educational organizations; **S7** Sponsoring of exhibitions; **S8** Operation of technology transfer centers, business incubators and the like; **S9** Changes in legislation*

Provision of information (S2) is the form of the support that is needed most of all by all groups both at the founding stage and at the stage of growth. Information is the thing that business expects from the authorities first of all.

Financial support (S1) is vital only for young and growing companies; this type of support isn't needed that much by mature companies though their ratings are rather high. It means that

small innovative business have started gaining trust in the governmental authorities, now companies have started to understand that governmental financial support can be one of the ways to cope with the barrier of cash shortages. We can say that governmental authorities now play more active role in the RIS not only forming it but also as agent engaged in the innovation activities itself. We should also mention that at the stage of growth young companies give financial support much lower ratings; however, in our opinion it is mostly caused by optimism of the young firms about the future than by absences of the necessity of the financial support at the stage of growth.

Sponsoring of exhibitions (S7) is important for young and mature companies, with this type of the support being especially crucial for young companies at the founding stage. We think that this is the way the group attempts to overcome the barrier of low demand for the new offering (B4) that is high for them at the stage of growth.

One of the most desirable forms of the support for the growing companies is instruction on business practices (S4). In the 2000s innovative entrepreneurs began to understand that it is vital for successful business development to have special knowledge and competences about making business. Nowadays the majority of the managers already posses knowledge about running innovative business so such type of the support is now less needed by the young companies.

Developing of the innovative infrastructure (such as operation of technology transfer centers, business incubators and the like (S8)) is among most need forms of the support only for mature companies; even though other groups of companies give this form of the support rather high ratings it is not one of the most desirable ones. This means that innovative infrastructure is indeed developing and improving.

On the average growing companies rate the necessity of the support higher than the other groups. Rather low ratings from mature companies could be explained by lack of trust in governmental authorities, the main request was not to hamper. That fact that young companies don't make high demands proves that small innovative business feels the support from the government anyway.

Young companies on the average give higher ratings to the support at the founding stage than at the stage of growth, while growing and mature ones – vice versa. We want to believe that this means that, one the one hand, small innovative business becomes stronger, and the regional innovation system takes its shape, on the other hand.

5   CONCLUSION

To conclude we test the hypotheses put forward above:

 ➢ *The RIS is becoming more stable and predictable; the barriers caused by uncertainty of the system are becoming lower. Different groups of companies see different barriers as the biggest obstacles for development, with the barriers of instability being lower for young companies.* – Indeed, the results that we got allow us to say that Russian economy is moving towards stability and predictability when companies start to gain confidence in the future. Though, there are still some barriers (like cash shortages and shortage of qualified staff) that remain unchanged.

 ➢ *When growing business becomes stronger and needs less support from the government. At the stage of growth the barriers are lower and support becomes less*

important comparing to the founding stage. – This is the case, for the small innovative business on the average barriers are higher at the founding stage than at the stage of growth. However, except for young companies, it wants to receive more support.

➢ *Governmental support is called to reduce the biggest obstacles that small innovative business can confront. The most desirable forms of support are those that are aimed to fight against the highest barriers for development.* – Indeed, companies suffer the most from cash shortages and financial support is among the most desirable forms of support. Though, this is true only for the founding stage.

In spite of the problems that still need to be solved the Regional Innovation System of Novosibirsk region is developing and becoming more and more shaped one, it is becoming more stable and one can make predictions about the future. This creates prerequisites for further development of innovation activities in the region.

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RELATIONSHIP BETWEEN INNOVATION OF SMES AND REGIONAL DEVELOPMENT IN POLAND. MEASUREMENT ISSUES[1]

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ABSTRACT
The goal of this study is to show the relationship between regional development and innovation of small and medium-sized enterprises in Poland. In addition to identifying factors that determine the mutual impact of regional development and innovation in SMEs, the possibilities of measuring this phenomenon were discussed.

Keywords*: Innovation of SMEs, Measurement, Regional development*

1   INTRODUCTION

Nowadays, one often hears that innovation contributes to the economic prosperity and the ability to create and adapt innovations is one of the main factors affecting the development. At the level of companies, regions and countries, but also in the broader aspect, innovation, the factors determining innovation and the effects of their implementation are examined. Very often, attention is focused on innovative companies as the source and supplier of innovative products and solutions. One should, however, remember that not only the company itself but also all its components (human resources, know-how) should be taken into consideration while examining innovation.

While creating and implementing innovation, enterprises, and especially SMEs, become part of a larger system, which to operate efficiently, requires the presence of regional environment conducive to innovation and which enhances ability to create innovation and promotes the penetration of innovation into economy. One should therefore strive to increase innovation not so much the innovation of the same enterprises as the whole regional environments, including the improved public awareness of the importance of innovation in the development of the region and enterprises, and to invigorate authorities of the region to take action to support innovation. The regional innovation policy plays an important role in this respect. The main objectives and support areas of the regional innovation policy should include encouraging innovation potential of the SMEs.

It should be noted that innovative small and medium-sized enterprises operating in the region contribute to its development. They engage local resources, including human resources, create new jobs, pay taxes and in many aspects implement the policy of corporate social responsibility. As a result, people do not emigrate from the region and the region itself is developing. Not without significance for SMEs taking innovation activities is the environment in which SMEs operate. A friendly region, encouraging innovation, motivates enterprises to

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undertake innovation actions. Therefore, both the innovative SMEs contribute to the development of the region but also the region determines that SMEs are undertaking innovative activities.

The purpose of this study is to show the relationship between regional development and innovation of small and medium-sized enterprises in Poland. The above has served as a background for the debate about the possibilities and methods of measurement of mutual influence of the region and innovative SMEs on each other.

2 REGIONAL DEVELOPMENT IN POLAND

In Poland, regional policy is defined as an integral part of the development policy, which in turn is described as "a set of interrelated activities undertaken and implemented in order to ensure the permanent and sustainable development of the country, socio-economic, regional, and spatial cohesion, increasing competitiveness of economy and creating new jobs at national, regional and local level" (The Act of December 6, 2006).

Since 1999, as a result of introducing in Poland a three-tier administrative division, the development at the level of each voivodeship, there are sixteen of them presently, is regarded as a regional development (Rozwój regionalny w Polsce, 2011, p. 14).

The Polish regions, due to the low GDP, became during the period of programming 2007–2013 the biggest beneficiary of the regional policy pursued by the European Union (Piech, 2011, p. 208). There are still, however, significant regional disparities, which can be reflected by GDP per capita. Table 1 shows the development of this measure over the years 2006–2009.

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Table 1: GDP per capita in Poland in current prices (Poland = 100) in the years 2006–2009 by regions (Polska w liczbach = Poland in Numbers, 2012, p. 5; Polska w liczbach = Poland in Numbers, 2011, p. 5; Poland in Numbers, 2010, p. 5; Polska w liczbach = Poland in Numbers, 2009, p. 5).

Voivodeship / Year	GDP per capita in current prices in years			
	2006	2007	2008	2009
Lower Silesian (dolnośląskie)	107.0	108.7	107.6	109.0
Kuyavian-Pomeranian (kujawsko-pomorskie)	87.4	86.8	86.4	84.7
Lublin (lubelskie)	67.6	67.7	69.4	67.2
Lubusz (lubuskie)	89.0	88.6	85.8	85.4
Łódź (łódzkie)	91.8	91.9	93.1	91.3
Lesser Poland (małopolskie)	86.7	85.7	86.3	85.8
Masovian (mazowieckie)	159.7	160.1	157.7	160.1
Opolskie	80.4	82.9	84.8	81.7
Podkarpackie	68.4	67.5	69.0	68.5
Podlaskie (podlaskie)	73.4	74.2	73.0	73.7
Pomeranian (pomorskie)	98.5	98.5	94.9	97.3
Silesian (śląskie)	106.1	106.1	108.0	107.2
Świętokrzyskie	76.0	76.9	80.0	77.6
Warmian-Masurian (warmińsko-mazurskie)	75.6	74.4	74.2	73.8
Greater Poland (wielkopolskie)	105.3	104.5	104.4	106.3
West Pomeranian (zachodniopomorskie)	91.1	89.8	90.7	87.9

Over the years, the Masovian (mazowieckie) voivodeship with Warsaw, the capital of Poland, crucial for development, was the best developed region in Poland. The GDP per capita higher than the average for Poland was also in following voivodeships: Lower Silesian, Silesian, and Greater Poland. Other regions produce a lower level of this indicator than the average value for Poland. This is an alarming phenomenon, given the fact that GDP per capita in Poland in 2009 stood at 60.6% of its equivalent for EU (Polska w liczbach, 2011, p. 4). Therefore, it is important for our country to develop regions and pursue active regional policy.

While examining the key factors of regional development in Poland the Ministry for Regional Development (MRD) pointed to (Rozwój regionalny w Polsce, 2009, pp. 23–24):
1. Resources:
    a. Human and social capital,
    b. Knowledge and innovation, including business competitiveness and innovation,
    c. Financial capital,
    d. Material resources.
2. Institutional factors:
    a. Quality and efficiency of public administration, including conditions for conducting economic activity and business environment,

    b. Institutional capability to manage development, including ability to plan, implement and appraise development policies, strategies, programs, and projects.

At the same time the MRD pointed out determinants decisive for further development of Polish voivodeships and made them necessary to (Rozwój regionalny w Polsce, 2009, p. 24):

- Develop regional specialization, e.g. in order to attract innovative companies,
- Develop knowledge and skills of human capital and to use them in economic processes,
- Boost ability to produce, develop, and diffuse innovations as determinants of contemporary development,
- Prepare the administration to manage development.

Thus, the same Ministry makes the development of Polish voivodeships dependent on innovation of enterprises operating in the region.

Taking above into account, it should be noted that in addition to regional policy, this is the innovation policy which becomes an integral part of regional development. The innovation policy may be defined as a system which consists of government programmes, instruments, mechanisms, and measures for affecting the level of innovation of particular entities, sectors as well as development of innovative structure of the economy (Okoń-Horodyńska, 2007, p. 3). By analysing the above concept, the regional innovative policy may be regarded as a set of instruments, principles, mechanisms, and measures used by entities of regional policy to stimulate innovative processes in the region (Nowakowska, 2011, pp. 102–103). The decentralization introduced in Poland in 1999 created the basis for pursuing active policy aimed at development of particular voivodeships on the basis of innovation. The main objectives of this policy and support areas include stimulating innovative potential of enterprises and SMEs in particular (Nowakowska, 2011, p. 4).

In Poland, each region has the so-called Regional Innovation Strategy (RIS). As a rule, these documents define regional plans of strategic nature within broadly understood innovation. It can be noted, however, that in many aspects the RISs do not take into account the specificity of particular regions (Nowakowska, 2011, p. 188) and set for regional innovation policy similar targets which in particular include:

1. Building a knowledge-based economy,
2. Improve co-operation between R&D centres with business,
3. Support the development of clusters,
4. Revival of business environment,
5. Better access for small and medium-sized firms to external financing (more information about regional innovation strategies can be found at http://www.pi.gov.pl/Polityka/chapter_86578.asp).

All the above mentioned targets will directly or indirectly determine the innovation activity of SMEs which shows the importance of this sector for regional development.

3   INNOVATIVE ENTERPRISES IN POLAND - REGIONAL APPROACH

In Poland the statistics of enterprise innovation are conducted by Central Statistical Office (CSO). The studies cover enterprises employing more than 9 persons, and therefore the so-called micro-enterprises are omitted. The study classifies enterprises according to the number of employees. Out of the surveyed enterprises 95.1% of enterprises in industry and 97.5% of

enterprises in services can be categorized as small and medium-sized enterprises therefore the vast majority of the sample were the SMEs.

Analysis of small and medium-sized enterprises demonstrated that:
- The percentage of medium-sized companies (50–249 employees) conducting innovative activity is two to three times higher than that of small enterprises (10–49 employees),
- The percentage of small and medium-sized enterprises implementing product[2] and process innovations is higher than in the case of organizational and marketing innovations (Działalność innowacyjna przedsiębiorstw w latach 2009–2011, *2012*).

For details, see Table 2.

Table 2: Percentage of innovative enterprises in the years 2009–2011 in Poland by number of employees (Działalność innowacyjna przedsiębiorstw w latach 2009–2011 = Innovation Activities of Enterprises in 2009–2011, 2012, pp. 26, 36, 42; http://www.stat.gov.pl/gus/nauka_technika_PLK_HTML.htm)

Type of innovation	Sector	10–49	50–249	250 and more employees
Product and process innovations	Industry	8.9	30.1	57.8
	The service sector	9.1	19.6	44
Marketing Innovations	Industry	5.3	11.4	29.9
	The service sector	6.5	11.4	30.7
Organizational Innovations	Industry	4.5	13.7	38.8
	The service sector	7.4	14.7	34.5

The CSO report identifies three types of innovation: product/process, marketing, and organizational. Although the Oslo Manual separately addresses product/service innovations and process innovation (Oslo Manual. The Measurement of Scientific and Technological Activities. Guidelines for Collecting and Interpreting Technological Innovation, 2005, pp. 16–17), the use of this classification is justified because often the product innovation is the result of process innovation and to create an innovative product may require the use of innovative machines and processes.

In addition, companies operating in the service sector and industry were separately considered in the study.

In Poland, this is the industry sector that is characterized by a higher percentage of companies implementing product/process innovations. The percentage of companies in the service sector, innovative in terms of product or process, is lower. This may be due to specificity of categories of innovations under consideration.

A comparison of innovation-active enterprises with those which actually introduced product/process innovation provides interesting information. The percentage of innovative enterprises is lower, but only slightly, than percentage of innovation-active enterprises. This means that the majority of innovative actions taken by Polish companies have been successfully completed and the companies have placed on the market product/service, or process innovations.

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[2] The concept of product innovation includes also service innovation.

Analysis of the structure of innovative companies by regions shows that it is difficult to explicitly determine which voivodeship is dominated by product, service, or process innovation entities. In industry, the biggest percentage of companies which implemented the said type of innovation was found in Podkarpackie, Opolskie, and Lesser Poland voivodeships. On the other hand, in the service sector, the biggest percentage of enterprises which successfully implemented product/process innovations operated in Pomeranian, Masovian, and Silesian voivodeships.

The study confirms the existence of significant differences in the level of innovation among industrial enterprises and enterprises in the service sector at the level of voivodeships in implementation of product/service innovations. The difference between the highest and the lowest value of percentage of innovative industrial enterprises in voivodeships is 9.9 percentage points, while for enterprises in the service sector it is 7.6 percentage points. (Działalność innowacyjna przedsiębiorstw w latach 2009-2011, 2012, pp. 7, 23–29). For details, see Table 3.

Table 3: Percentage of innovative and innovative-active enterprises in product and process innovations in the years 2009–2011 in Poland, regional approach (Działalność innowacyjna przedsiębiorstw w latach 2009–2011 = Innovation Activities of Enterprises in 2009–2011, 2012, pp. 23–24, 29; http://www.stat.gov.pl/gus/nauka_technika_PLK_HTML.htm)

Sector	Industry		Services	
Voivodeship	Innovation- active enterprises	Innovative enterprises	Innovation- active enterprises	Innovative enterprises
Pomeranian (pomorskie)	16.5	16.2	15.3	14.1
Masovian (mazowieckie)	15	13.9	14.4	13.7
Silesian (śląskie)	17	15.2	15.1	13.2
Kuyavian-Pomeranian (kujawsko-pomorskie)	19.1	18.8	11.9	11.9
Greater Poland (wielkopolskie)	18.9	18.5	12.3	11.7
Podkarpackie	22.2	21	12.5	11.4
Lesser Poland (małopolskie)	20.2	19.5	12.1	11.1
Opolskie	20.6	20.1	10.3	10.3
Lubusz (lubuskie)	12.5	12.3	11.2	10.2
Lublin (lubelskie)	20.1	19.3	10.8	9.7
Lower Silesian (dolnośląskie)	16.1	15	9.7	9.6
Warmian-Masurian (warmińsko-mazurskie)	16.1	15.5	9.7	9.4
Podlaskie (podlaskie)	17.1	17.1	9.3	8.9
Łódź (łódzkie)	11.5	11.1	8.5	8.5
Świętokrzyskie	15.9	15.6	7.9	7.7
West Pomeranian (zachodniopomorskie)	14.1	13.2	6.6	6.5

Based on the analysis of Polish enterprises in terms of implementation of organizational and marketing innovations it can be concluded that the percentage of firms introducing innovations under consideration is similar. The differences in this regard between companies in the industrial and service sectors are negligible.

The analysis of innovation structure by regions shows that the biggest percentage of enterprises which have successfully implemented marketing and organizational innovations could be seen in Pomeranian, Masovian, and Greater Poland voivodeships. Similar regional structure could be found among service enterprises which implemented product and process innovations. Unfortunately, the analysis of the structure of industrial innovative companies by regions does not clearly show which voivodeship is dominated by entities innovative in terms of organization or marketing except for the emerging Lesser Poland voivodeship. (Działalność innowacyjna przedsiębiorstw w latach 2009–2011, 2012, pp. 39–45). For details, see Table 4.

Table 4: The percentage of innovative companies in the field of marketing and organizational innovations in the years 2009–2011 in Poland - by regions (Działalność innowacyjna przedsiębiorstw w latach 2009–2011 = Innovation Activities of Enterprises in 2009–2011, 2012, pp. 39, 45; http://www.stat.gov.pl/gus/nauka_technika_PLK_HTML.htm)

Sector	Industry		Services	
Voivodeship	Marketing innovation	Organizational innovation	Marketing innovation	Organizational innovation
Pomeranian (pomorskie)	7.1	7.8	9.7	10.7
Masovian (mazowieckie)	7.6	6.4	10	14.2
Silesian (śląskie)	7.4	10.2	7.9	9.3
Kuyavian-Pomeranian (kujawsko-pomorskie)	8.9	9.1	7.6	4.2
Greater Poland (wielkopolskie)	7	7.7	8.3	11.4
Podkarpackie	9.5	9.5	7.8	4.6
Lesser Poland (małopolskie)	11.6	12.1	7.4	7.9
Opolskie	6.4	9.9	4.8	5.5
Lubusz (lubuskie)	6.1	7.3	4.6	3.8
Lublin (lubelskie)	10.1	8.6	5.2	5
Lower Silesian (dolnośląskie)	7.3	9.4	5.5	7
Warmian-Masurian (warmińsko-mazurskie)	6	9.7	8.3	8.5
Podlaskie (podlaskie)	7.1	5.1	5.9	3.4
Łódź (łódzkie)	9.9	6	6.5	5.4
Świętokrzyskie	7.4	4.9	4.8	4.2
West Pomeranian (zachodniopomorskie)	4.8	6.4	6.6	9.0

Summing up the above it should be noted that it is not possible to indicate the leading voivodeship in the context of the share of innovative companies in all enterprises operating in the region. One voivodeship is characterized by a high percentage of service companies implementing organizational innovations and another by a high share of industrial firms introducing process innovations.

4   SMES AND THEIR IMPACT ON REGIONAL DEVELOPMENT

A region is an open system, dependent on the environment in which it operates. The analysis of regional development cannot ignore the importance of SMEs as an element of the region's environment. The literature cites a number of reasons for the above. This paper will present the most popular concepts.

Firstly, the small and medium-sized enterprises are a manifestation and visible effect of entrepreneurship which since the times of Schumpeter has been considered to be an important factor of economic growth (eg. Schumpeter, 1934). Secondly, they are the givers and takers of innovation contributing to the economic development based on innovation. Thirdly, this type of firms occurs mostly in places where the entrepreneurs/founders live and take advantage of local resources, pay their taxes there and create a climate for further investment, resulting in the development of the region and reducing disparities in (Krawczyk, 2012, pp. 28–29). Fourthly, the small and medium-sized enterprises are active executors of the concepts of sustainable development and corporate social responsibility, which is also a factor for development of the region (eg. COM, 2002, 347; Schaper, 2002, pp. 526–527; Wprowadzenie do tematyki społecznej odpowiedzialności biznesu dla małych i średnich przedsiębiorstw, p. 2). And fifthly, the small and medium-sized enterprises account for a majority of all enterprises which demonstrates the strength and importance of the whole SMEs sector in the context of innovation and impact on regional development (Duarte, 2004, p. 1).

In view of the above one should take innovative SMEs in regional innovative policy and strive to identify barriers they face and find solutions for the support of their innovative activities. To achieve this it is necessary to properly classify and collect information, which will make it possible to come to the heart of the problem and based on the results of data analysis take appropriate actions (Głuszczuk, 2011, p. 99).

5   MEASURING ISSUES OF THE MUTUAL INFLUENCE OF INNOVATIVE SMES AND THE DEVELOPMENT OF REGIONS

The importance of the innovation-based development requires an on-going monitoring of the level of innovation (Giovannini, 2008, p. 106), not only at the national level but also in other disaggregated approaches (*Measuring Innovation* …, 2010). A region or an enterprise may be the subject of disaggregation. In addition, one can explore many aspects within this framework, including development based on innovation. It is argued that the systemic approach to innovation process statistic surveys may become a source of information on firms' linkages with other actors on the innovation scene including also a region (Oslo Manual, 2005, p. 40).

As evidenced by the OECD regional differences in levels of innovation activity can be substantial. Therefore, prior to measurement, it is necessary to identify main characteristics and factors that promote innovation activity and regional development (Oslo Manual, 2005, p. 39). The elements quoted above, that determine growth of regions include resources (human, financial, material, available knowledge and innovation potential) and institutional factors (e.g. the number and scope of operation of business environment institutions, the efficiency of public administration) (Rozwój regionalny w Polsce, 2009, pp. 23–24). Each of these factors can and should be measured in order to show the full picture of innovativeness of regions and enterprises operating in these regions.

In our opinion, due to the above and in order to indicate mutual influence of innovative SMEs and the region on each other it is necessary first to identify and measure the determinants of innovations in SMEs and separately identify and measure elements affecting the development of the region based on innovations. On the one hand, it will show to what extent the regional (innovation) policy decides that SMEs take up and pursue innovation activity and ensures the success of innovation in the regional market. On the other hand, it will show the main sources of innovation in the region and SMEs' help in this respect, and will reflect the effects of the regional innovation policy.

This will also help find common barriers that hamper innovation activity and slow down regional development. It must be remembered that the region and the entities operating in the region, including enterprises, operate in the same environment and use the same resources.

Measurement of business innovation and regional development measure are difficult issues. This is due to:
- Limitations encountered by surveys of innovation and regional development (Kozłowski, 2009, pp. 105–121),
- The impact of factors which are difficult to measure on innovation and regional development (Papon and Barré, 1993, p. 138),
- Continuity of the innovation process (Krawczyk, 2012, p. 55–56).

Since the measurement of innovativeness of enterprises, including small and medium-sized, as well as measurement of regional development based on innovation face many constraints, it is necessary to consider whether it is possible to examine the mutual influence of the region and SMEs sector on each other.

Taking into account the data given in this paper on innovations implemented in the region it should be noted that the data did not allow to clearly identify the Polish voivodeships with the biggest number of innovative firms.

The possibility of verifying to what extent the innovation which is implemented is the sole effort of the enterprise and to what extent the success of innovation was determined by the level of regional development is an additional problem. It is therefore difficult to measure the impact of the region and regional policy on the process of creating innovation by SMEs and whether the innovation succeeds or fails in the market.

We are of the opinion that it is an extremely difficult process to measure the influence of the region and the SMEs sector on each other. It requires colleting extensive range of statistical data, building new measures and constant monitoring because of the changeability of environment. In addition, the occurrence of these constraints and barriers hampering both the innovation activity of SMEs and regional development may distort the obtained measurement.

Nevertheless it is necessary to make attempts to estimate the influence of small and medium-sized enterprises on the region and the region's influence on SMEs. This will allow drawing conclusions which could be implemented when developing regional, innovative or entrepreneurial policy.

6 CONCLUSION

Since 1999, as a result of a three-tier administrative division introduced in Poland, it is a voivodeship which has been regarded as a region. There are sixteen voivodeships in Poland. The Polish regions, due to the low GDP, during the period of programming 2007–2013, have become the biggest beneficiaries of regional policy pursued by the European Union. There are still, however, significant disparities in the development of voivodeships, which can be reflected by GDP per capita or the percentage of innovative SMEs in all enterprises operating in the region.

Similar to the low GDP per capita in particular voivodeships so low is the percentage of innovative small and medium-sized enterprises operating in the Polish regions. This can confirm the existence of a relationship between regional development and innovation of SMEs. According to the studies of Central Statistical Office in Poland ca. 9% of small and 30% of medium-sized industrial enterprises have implemented product/process innovation. This percentage is lower for companies operating in the service sector and SMEs which introduce organizational and marketing innovations. Characteristic for the Polish regions is the existence of significant differences in the level of innovation of industrial enterprises and the service sector at the level of voivodeships, which may be due to low innovation potential of the firms themselves as well as that of the environment in which they operate, the regions in particular.

Therefore one should take actions aimed at understanding and measuring the factors which decide that SMEs take up innovative actions as well as determine the developments of regions. It must be however remembered that innovative small and medium-sized enterprises bring many benefits to the region and the friendly region is conducive to innovation activities. This bilateral relationship between SMEs' innovative activities and regional development is, unfortunately, difficult to grasp, and thus to measure.

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LARGE AND SMALL BUSINESS IN RUSSIA: INNOVATIVE ACTIVITY AND STRATEGIC PRIORITIES

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ABSTRACT

Industrial companies are the core of the national innovation system. However, large, medium and small enterprises differ significantly in their role in the innovation system, resource potential, strategic priorities and objectives. The paper focuses on a comparative analysis of the strategic priorities of innovative activities of Russian companies of different size. We have identified three types of companies: small innovative companies, large and medium-sized companies with a traditional business model, major innovation-driven companies with an integrated business model. Our analysis of the trajectories of small innovative firms located in Novosibirsk Scientific Center showed that the majority of the companies could be characterized either as Start-up firm or as Specialized supplier. Start-ups are newly established small firms who have recently separated from the major research labs or parent companies. The typical behavior model for such companies is innovative entrepreneurship. Specialized suppliers are small companies that provide significant contributions to complex manufacturing systems in the form of equipment, parts, tools and software. Innovative objectives of such small companies deal with design and production of the specific elements required for large companies. Large and medium-sized companies with a traditional business model are characterized by the existing structure of commodity output and the supply chain. Characteristic type of innovative behavior for such companies includes incremental product and process innovations. Large innovation-oriented companies with an integrated business model have in their structure traditional production units and innovative units. Innovation priorities of major innovation-oriented companies with integrated business model are consistent with the hybrid model of behavior which combines the traditional model with an innovative entrepreneurship.

Keywords: Business model, Innovation, Strategic priorities

1 INTRODUCTION

Industrial companies are the core of the national innovation system. However, large, medium and small enterprises differ significantly in their role in the innovation system, resource potential, strategic priorities and objectives. The paper focuses on a comparative analysis of the strategic priorities of innovative activities of Russian companies of different size.

The complexity of such analysis is due to the low availability of information. This appears as a consequence of imperfect innovation statistics, information closeness of Russian companies, their unwillingness to disclose the innovation side of the business.

In the matching process we used:
- Official data of State Statistics

- The data collected through special study of small innovative firms located in Novosibirsk Scientific Centre[1]
- The data collected through special study of small innovative companies in the project "Competing for the Future Today: a New Innovation Policy for Russia"
- Rating agency "Expert RA" researche
- Inputs for the report of the RSPP "The Competitiveness of Russian Business and its Development in the Near Future"
- Research of the New Economic School (NES) and the Center of Technology and Innovation PricewaterhouseCoopers.

The heterogeneity of data sets underlying this research as well as different approaches to data collection and analysis cause the illegitimacy of comparing the numerical values of specific parameters. Nevertheless we were able to identify some general facts and trends.

2   INNOVATIVE BEHAVIOR AND STRATEGIC PRIORITIES

To characterize the features of innovative behavior, depending on the scale of the business, we have divided companies into three types: small innovative companies, large and medium-sized companies with a traditional business model and major innovation-driven companies with integrated business models (companies with research and production units).

Small innovative companies are extremely important in developed market-oriented countries since they act as main institutions providing effective transfer of the fundamental research to real economy. Our analysis of the trajectories of small innovative firms located in Novosibirsk Scientific Center showed that the majority of the companies could be characterized either as Start-up firms or as specialized suppliers (Kuznetsova, 2010).

Start-ups are newly established small firms who have recently separated from the major research labs or parent companies. Usually at the start of their activities such companies rely heavily on the "mother" organization. This can be in a form of direct financial support or shared infrastructure. The later means that small company is allowed to use on favorable terms space and/or research and production base of the "mother" company or research institute. The typical behavior model for such companies is innovative entrepreneurship - selection and pilot exploration of scientific and technological ideas.

Specialized suppliers are small companies that provide significant contributions to complex manufacturing systems in the form of equipment, parts, tools and software. Innovative objectives of such small companies deal with design and production of the specific elements required for large companies.

Large and medium-sized companies with a traditional business model are characterized by the existing structure of commodity output and supply chain. Strategic focus of such companies on operational efficiency and financial performance certainly affects their innovation priorities. The research of large Russian companies' innovative projects, made by the "Expert RA" agency, showed that the majority of projects aim to increase quality of traditional products or to upgrade them to higher price segments. Generally our large companies'

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[1] The study was conducted in 2009–2010 by the group of researchers with the participation of the author. The special questionnaire was worked out. The sample consists from 60 firms.

products place on the Russian and international markets tend to take place in the price range between products from China and products from the U.S. and Europe. Almost all the surveyed companies are focused on the Russian market. Almost all presented projects are related to "improving" innovations. Unfortunately "pioneer" projects aiming to establish leadership in high-technology industries or create new markets are missing in the sample (http://www.raexpert.ru/researches/stimulate_innovation/part1).

Thus characteristic type of innovative behavior of large companies with a traditional business model includes incremental product and process innovations.

Major innovation-driven companies with an integrated business model have in their structure traditional production units and innovative units, involved in the development of new high-tech areas. Unfortunately businesses that can be classified as a major innovation-oriented companies with an integrated business model are very few in Russia. The most vivid examples are Rosatom State Nuclear Energy Corporation, Russian Technologies State Corporation, Corporation (AFK) "System", Federal Grid Company UES.

Innovation priorities of major innovation-oriented companies with integrated business models are consistent with the hybrid model of behavior which combines the traditional model with an innovative entrepreneurship.

The typical innovative behavior models of different groups of companies are summarized in Table 1.

Table 1: Models of innovative behavior

Type of company	Characteristics of innovative behavior
Small innovative companies	
-Start-ups	Innovative entrepreneurship - selection and pilot exploration of scientific and technological ideas
- Specialized suppliers	Design and production of the specific components
Large and medium-sized companies	
Large/medium-sized companies with traditional business models	Incremental product and process innovations
Major innovation-driven companies with integrated business models	The hybrid model (traditional model + innovative entrepreneurship)

3 INNOVATIVE ACTIVITY OF LARGE AND SMALL BUSINESSES

According to statistics during the first decade of the XXI century innovative activity of Russian industry remained low: the number of enterprises that carried out innovations is in the range from 9.3 to 10.6% of the total number of enterprises. The highest values of indicators of the innovative activity are typical for Russian high-tech sectors (telecommunication equipment, aircraft and space vehicles, etc.): in 2009 the corresponding value approached the European average and reached 29%.

In an analytical report "Russian innovation index" (Gohberg, 2011) dedicated to an evaluation of the status of the Russian innovation system components it is showed that the innovation activity of an enterprise directly depends on its size (see Table 2).

Table 2: Innovation activity and size of the business

Number of personnel	less than 50	From 50 to 100	From 100 to 200	From 250 to 500	From 1000 to 5000	From 5000 to 10000	More than 10000
The share of innovative companies (%)	1,2	4,6	7,0	12,5	39	70	76,6

Thus, the innovative activity of small businesses in Russia is much lower than that of large ones. However a number of recent studies has shown a positive dynamics of the share of small enterprises implementing technological innovation. Leaders in innovation activities are enterprises in the chemical industry (11.3%) and also enterprises producing electrical, electronic and optical equipment (10.9%).

The causes of low innovation activity of Russian companies are rooted in the sectoral structure of the economy as well as the lack of sufficient incentives for innovations. A low level of competition in the dominant part of Russian markets reduces motivation for their design and implementation. Lack of resources typical for our enterprises also has a negative impact on their innovative activity.

Russian companies are spending on innovations much less than their foreign competitors in the relevant sectors. As a result active enterprises never have enough resources for the innovations.

According to the study of rating agency "Expert RA", before the crisis the share of R&D expenditure in revenues of the largest Russian companies (rating "Expert-400") was about 0.5%, 4-6 times lower than that of foreign companies. In two last years this index had fallen by more than a half - to 0.2% of total revenues.

Leaders in terms of R & D investments in Russia are the machine building companies, but even among them the ratio of R & D costs to revenue do not exceed 2%. In less technologically advanced sectors of the economy the gap is even larger. For example, for Severstal Group the ratio of R&D costs to the company's revenue in 2009 amounted to 0.06%, while the value of the same indicator of metallurgical corporation ArcelorMittal was to 10 times more. According to some estimations, corporate spending on R&D in Russia had been rapidly recovering in 2010. However, the return of innovative activity of large Russian companies to pre-crisis levels would only mean the conservation of the gap with the world's technological leaders.

Entrepreneurs themselves consider underfunding as a leading cause of the sluggish innovative activity of enterprises. According to statistics, 74% of the total expenditure on innovation in the industry as a whole in 2009 were own funds of enterprises. Budget support provided only 3.4% of these costs (Gohberg, 2011). Our study confirms that this trend holds for small innovative firms. 98% of the respondents used own funds to finance innovation. Among other sources of funding the majority of respondents pointed bank loans, public and partners money.

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In general for the Russian industry the share of innovative products in the total sales amounted 4.6% in 2009. In fairness it should be noted that such a low value of the index is due to the crisis in the economy. In the preceding five years this indicator showed a somewhat higher value. The share of fundamentally new products in total industrial production in Russia is very small, less than one-tenth of a percent. The value of this parameter in the high-tech sector is slightly higher (0.5%). In the total volume of innovative products items which are new only for the producing company or improved products, characterized by a low level of novelty, strongly dominate.

HSE survey found that only 5% of large innovative companies believe that their products are new to the world market, the majority focuses product innovations to national Russian markets.

Innovative activity of large Russian companies is focused primarily on the acquisition of machinery and equipment of foreign manufactures. Even mega-companies employing over 10 thousands people prefer importing key knowledge from abroad. The main reason is the deep technological gap, so the follower strategy is the only leaving alternative (Gonchar, Kuznetsov and Simachov, 2010). The data shows that a high percentage of companies (34.6%) from the group of innovation-active did not carry out any activity relating to the creation of new knowledge (research, development, design). It also indicates that the dominant strategy is a passive technological borrowing. Although most researchers agree that the borrowing and adaptation could become the main sources of rapid catch-up technology development, the experience of the advanced innovative countries testifies that borrowing must be accompanied by the creation of an additional new knowledge. In terms of "the ability of companies to borrow and adapt technologies" Russia was at a 41 place out of 133 in 2009 (http://www.raexpert.ru/researches/stimulate_innovation/part1).

For small enterprises an average value of an index of the share of innovative products in the total goods and services produced is less than the total for the industry. On the whole in the manufacturing industry the share of innovative products is 1.5%. Somewhat better the situation is in the chemical industry (4%) and in the production of electrical and optical equipment (5.4%).

In our study using two basic parameters (level of products' novelty and orientation to the national or international market) we distinguished a group of 26 companies (30% of respondents), which we call "leaders". For such companies, the predominant sources of technological innovation are a privatization of academic results and development of products and processes in rapidly growing sectors (specialized software, scientific instrumentation, biotechnology, electronics, etc). Average assessments of a level of the produced goods/services novelty for the leaders are rather high: 61.5% of respondents believe that their products are new for the Russian market, and 50% - new to the world market. The relatively high level of the novelty of the products of companies - leaders is accompanied by using a strategy "high quality at a high price". In general companies - leaders are following a more proactive approach, they tend to be more open to the outside world and are willing to cooperate with other actors of the innovation system (Kravchenko, Kuznetsova and Usupova, 2011).

4 INCENTIVES AND BARRIERS TO INNOVATION

A number of surveys of Russian companies clearly demonstrate that in general the Russian economic environment does not generate sufficiently strong incentives to increase the innovative activity of companies. However, factors that motivate companies to innovate are essentially determined by their industry and characteristics of the markets. According to companies' executives, only two sectors of the Russian economy (the food industry and the ICT sector) have relatively high incentives for innovation in combination with sufficient resources. In the majority of industries including oil and gas, electronics, automobiles, infrastructure industries a level of incentives for innovative activity is estimated as very low. Innovative activity of firms is negatively affected by such industry factors as existing level of competition, low requirements for innovativeness of products and services in the domestic market, complexity of the access to the global markets, low level of intellectual property protection (http://www.opora.ru/analytics/our-efforts/2010/06/30).

One of the main objectives of our study of small innovative firms located in Novosibirsk Scientific Centre was to identify the main barriers for their development and growth. In the questionnaire we pointed out typical barriers, which were estimated by respondents on 6-grade scale (5 – the most important, 0 - insignificant).

As the most significant barrier respondents indicated the lack of financing for business creation and development. Financing is the key factor for all small business. The majority of new firms are low-budget start-ups launched with personal savings and contributions of friends or relatives. The second barrier is the shortage of qualified staff. The staff limitation becomes more important as a company moves from introduction to growth stage of life cycle. Inadequate laws, a high cost of innovation and an uncertainty of demand for new products were also recognized as significant obstacles to business development (Kravchenko, Kuznetsova and Usupova, 2011).

In a project "Competing for the Future Today: a New Innovation Policy for Russia" the survey of executives of small innovative companies as well as representatives of medium and large businesses was carried out. In the survey managers were asked to name three major obstacles restricting the innovative development of their companies. The representatives of small businesses named as the main obstacles for innovation the lack of available funds within the company, the low availability of external financing and the costs and risks associated with innovation. 18% of respondents consider as the significant obstacle to innovation the lack of qualified personnel. Ranking the barriers for large and medium enterprises shows very similar results (Table 4).

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Table 4: The most important barriers to the innovative development

	Small business, Novosibirsk (score on a 6-point scale)	Small Business [5] (% of respondents who reported this factor)	Large/Medium Business [5] (% of respondents who reported this factor))
1	Lack of financing (3,2)	Lack of available funds within the company (60%)	Lack of available funds within the company (62%)
2	Shortage of qualified staff (2,8)	Low availability of external financing (50%)	High costs of innovation (33%)
3	Inadequate laws (2,7)	High costs of innovation (40%)	Low availability of external financing (33%)
4	High costs of innovation (2,4)	Uncertain demand for new offerings (24%)	Uncertain demand for new offerings (23%)
5	Uncertain demand for new offerings (2,3)	Shortage of qualified staff (18%)	Shortage of qualified staff (19%)

Thus, we can draw a general conclusion that major barriers to innovative development of Russian companies are financial and demand constraints, imperfect institutional environment and human potential.

5 CONSLUSION

Although major business is at the heart of the Russian innovation system, most of the largest Russian companies focus their innovation on the domestic market by implementing a strategy of passive technology adoption. A contribution of small business in the innovative development of the country is still fairly low but the results of surveys and prominent success stories of small innovative firms show that a cohort of small innovative companies with products that meet world standards of novelty and aiming the global markets is formed.

Cooperation of participants of the national innovation system is crucial for its effective functioning. Increasing the contribution of small business in the innovative development should be supported by a creation of innovative infrastructure, formation of demand for innovative products from the big business and the state.

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THE ROLE OF SMES IN NATIONAL ECONOMIES: THE CASE OF SOUTH AFRICA

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ABSTRACT
The structure of business in South Africa has changed quite significantly over the past 15 years. Historically dominated by large corporations and their expansion programmes, South Africa's economy and its future growth is now depending on SMEs. In pursuit of economic participation by all, the development of small and medium-sized enterprises (SMEs) has become vital to bring about economic prosperity in South Africa. Although limited in size, SMEs dominate local and international economies in numbers. SMEs encompass a very broad range of firms, from established traditional family businesses employing over a hundred people (medium-sized enterprises), down to the survivalist self-employed from the poorest layers of the population (informal microenterprises). The sector is acknowledged worldwide as an economic powerbase to stimulate economic growth. Small and medium-sized businesses are therefore not merely necessary, but vital in an emerging and growing economy such as that of South Africa. In South Africa, SMEs account for about 91% of the formal business entities, contributing to about 51% of GDP, and providing almost 60% of employment. The South African government has therefore prioritised the advancement of Small, Medium and Micro-sized Enterprises (SMEs) as the catalyst to achieving economic growth, development, job creation, mitigation of poverty, and as an economic empowerment vehicle for previously disadvantaged people. The main challenges affecting SMEs in South Africa include lack of management skills, finance, access to bank credit, lack, access to markets, and skills shortage. The African continent is currently undergoing an unprecedented rate of rapid development. Without economic transformation, however, it is difficult to expect further progress. In this regard, the promotion of SMEs cannot be overlooked.

Keywords: Challenges, Economic growth, SMEs, South Africa

1 INTRODUCTION

SMEs are now appreciated as a necessary complement to the industrial structure of any modern economy in many developed and developing nations of the world. In many countries, the dynamic role of SMEs as engines through which the growth objectives of development can be achieved has long been recognized. This role is especially prevalent in meeting the challenges of unemployment, in ensuring a more equitable income distribution and in providing opportunities for individual skills development. Small and medium-sized businesses are not merely necessary, but vital in an emerging and growing economy such as that of South Africa.

The structure of business in South Africa has changed quite significantly over the past 18 years. While South Africa's economy has historically been dominated by large corporations and their expansion programmes, this is no longer the case. The South African government

has prioritised entrepreneurship and the advancement of Small, Medium and Micro-sized Enterprises (SMEs) as the catalyst to achieving economic growth and development, (Department of Trade and Industry, 2001).

In view of the importance and place of SMEs in an economy, it is imperative that SMEs be given the priority they deserve. In his 2011 State of the Nation address, President Zuma stated that "the small business sector is a critical component of the job creation drive". The purpose of this paper is to highlight the role that SMEs play in the South African economy and to revisit the challenges facing the growth of South African SMEs. Despite voluminous research, however, there is still little clarity on the extent to which South Africa's SMEs contribute to poverty alleviation, economic growth, or international competitiveness.

2   ECONOMY OF SOUTH AFRICA

The economy of South Africa is the largest in Africa. It accounts for 24% of Africa's Gross Domestic Product, and is ranked as an upper-middle income economy by the World Bank, which makes the country one of only four countries in Africa represented in this category (the others being Botswana, Gabon, and Mauritius (Therichest.org, 2012). According to official estimates, a quarter of the population is unemployed (Bloomberg, 2010) and a quarter live on less than US $1.25 a day (UNDP, 2011).

The first South African democratic government inherited from apartheid extreme levels of poverty, inequality in wealth and income and highly skewed access to social services, educational and employment opportunities. Since 1994, South Africa has been faced with the challenges of re-integration into world markets as a global economy, while at the same time positioning itself to realise the high expectations of its populace regarding a successful transition towards a more democratic order. To achieve the objectives of economic growth through competitiveness, employment generation and income redistribution, South Africa's small, micro and medium-sized enterprise (SME) economy has been actively promoted since 1995.

3   THE SOCIO-ECONOMIC PROBLEMS IN SOUTH AFRICA

Every country has its own unique socio-economic problems. The socio-economic problems of South Africa have been exacerbated by the apartheid policies followed by the previous government. In spite of it being over 18 years since the demise of apartheid, poverty, ailing public health system, HIV/AIDS, xenophobia, crime, poor service delivery, and a lack of access to education, housing, and employment opportunities, is still a reality for millions of previously disadvantaged South Africans. According to data provided by the last census in South Africa in 2011, approximately 25% of South Africa's 51 million inhabitants live in informal dwellings, many in corrugated wood or iron shacks facing a range of basic livelihood challenges, including poor access to basic sanitation and water supply, solid waste accumulation, recurrent shack fires, safety and security risks, and a range of health hazards, (Statistics South Africa, Community Survey, 2011). Despite the best intentions of government, and the progressive nature of policies such as Breaking New Ground, limited progress has been made in bringing much needed development and quality of life improvements to this significant portion of South Africa's population. Research has shown that the poverty gap between the rich and the poor is widening, and some municipalities have as many as 85% of their residents living below the breadline (HSRC Review, June 2012).

Despite good economic growth in the past, a major concern for South African economists is the lack of job creation, which results in high unemployment, for example, unemployment Rate in South Africa increased to 25.50 percent in the third quarter of 2012 from 24.90 percent in the second quarter of 2012, (StatsSA, 2012). From these statistics, it is evident that the sustainability and growth of small business are vital topics for research.

To speedily address the above mentioned social-economic problems requires tremendous resources, and the government alone cannot cope. According to Rockey (2003) if it was left to the South African government alone to uplift the previously disadvantaged communities, it will simply take too long. The patience of the marginalized communities is already running out, as is evidenced by the spate of protests regarding poor service delivery by the state. Hence, there is a need for private sector involvement given the magnitude of the socio-economic problems in South Africa. It is in businesses' own interest to help stabilize the social landscape and grow the economy, since their long-term livelihood and success is intrinsically linked to the wellbeing of South Africa and its citizens (CSI Handbook, 2003).

The primary reason for the disappointing socio-economic development since the 1980s may be that policy makers have grossly underestimated the role of SMMEs in the South African economy. In fact, prior to 1994, the year in which the first democratically elected (ANC) government came into power; the previous (National Party) government neglected the small business sector and concentrated trade and economic policy on large conglomerates and parastatal enterprises, (www.brain.co.za).

4   DEFINING SMES

While the importance of the SME sector is acknowledged internationally, defining an SME is a challenging task, as every country has its own definition. In Chile for example, companies are generally classified according to annual turnover; in South Africa, by turnover, gross asset value and the number of employees. In India, any industrial undertaking with fixed assets less than 10 million Rupees is classed as small-scale, (Grayson, 2003). EU Member States traditionally have their own definition of what constitutes an SME, for example the traditional definition in Germany had a limit of 250 employees, while, for example, in Belgium it could have been 100. But now the EU has started to standardize the concept. Its current definition categorizes companies with fewer than 10 employees as "micro", those with fewer than 50 employees as "small", and those with fewer than 250 as "medium", (Berry, 2002). There is no single, uniformly accepted definition of a small firm (Storey, 1994).

The abbreviation "SME" occurs commonly in the European Union (EU) and in international organizations such as the World Bank (WB), the United Nations (UN) and the World Trade Organization (WTO). The term "small and medium businesses" or "SMBs" is predominantly used in the USA. In South Africa the term is "SMME" for small, medium and micro-enterprises, the terms 'SMME' and 'SME' are however used interchangeably in South Africa. Elsewhere in Africa, MSME is used for micro, small and medium enterprises.

4.1   Defining SMEs in South Africa

Like other countries, the issue of what constitutes a small or medium enterprise is a major concern in South Africa. Various authors have usually given different definitions to this category of business. In South Africa, a 'small business' is officially defined in Section 1 of the National Small Business Act (NSB Act) of 1996 as amended by the National Small Business Amendment Act of 2003 and 2004 as: "a separate and distinct business entity,

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including co-operative enterprises and nongovernmental organizations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub sector of the economy".

The NSB Act further categories small businesses in SA into distinct groups, namely; survivalist, micro, very small, small and medium, hence the use of the term "SMME" for small, medium and micro-enterprises.

Table 1: Categories of SMMEs as per the National Small Business Act (DTI, 2008)

Category of SMME	Description
Survivalist enterprises	Operates in the informal sector of the economy. Mainly undertaken by unemployed persons. Income generated below the poverty line, providing minimum means to keep the unemployed and their families alive. Little capital invested, not much assets. Not much training. Opportunities for growing the business very small.
Micro enterprises	Between one to five employees, usually the owner and family. Informal - no license, formal business premises, labour legislation Turnover below the VAT registration level of R300 000 per year. Basic business skills and training Potential to make the transition to a viable formal small business.
Very small enterprise	Part of the formal economy, use technology Less than 10 paid employees Include self-employed artisans (electricians, plumbers) and professionals.
Small enterprise	Less than 100 employees More established than very small enterprises, formal and registered, fixed business premises. Owner managed, but more complex management structure
Medium enterprise	Up to 200 employees Still mainly owner managed, but decentralised management structure with division of labour Operates from fixed premises with all formal requirements.

According to the Finscope 2010 study, the SME sector has an estimated 5.6 million small businesses operating in South Africa, creating 11.6 million total employment opportunities –

that is six million jobs excluding the small business owners themselves. The sector is however heavily skewed towards micro-enterprises, with 82 percent of South African enterprises being micro or very small (as defined by the National Small Business Act).

5 THE ROLE OF SMES

Interest in the role of SMEs in the development process continues to be in the forefront of policy debates in most countries. SMEs are often described as efficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines. Even in the developed industrial economies, it is the SME sector rather than the multinationals that is the largest employer of workers, (Mullineux, 1997). Fayad (2008) propounds that most of the current multi-million dollar enterprises have their origin in SMEs. Naturally all businesses start as small businesses or even start out of small businesses initiated by individuals. Some of the world's leading Korean companies such as Samsung and LG were once small enterprises. From these examples, it is clear that SMEs are important to the development process and that it would be beneficial for African countries to promote SMEs for further growth.

Any sector creating 50% of the new jobs in any economy needs to be nurtured. A healthy SME sector contributes prominently to the economy through creating more employment opportunities, generating higher production volumes, increasing exports and introducing innovation and entrepreneurship skills. According to Bashir Ahmad Fida (2008), SMEs are the first step towards development in economies towards industrialization. One of the significant characteristics of a flourishing and growing economy is a vibrant and blooming SME sector. SMEs play a pivotal role in the development of a nation. They contribute to socioeconomic development in various ways, by creating employment for a rural and urban growing labour force and providing desirable sustainability and innovation in the economy as a whole.

It is estimated that SMEs employ 22% of the adult population in developing countries (Daniels, 1994; Daniels and Ngwira, 1992; Daniels and Fisseha, 1992; Fisseha, 1992; Fisseha and McPherson, 1991; Gallagher and Robson). UNIDO (1999) estimates that SMEs represent over 90% of private business and contribute to more than 50% of employment and of GDP in most African countries. Aside from these strengths, SMMEs have established a successful track record globally in way of building systemic productive capacities, nurturing entrepreneurship and innovation, and serving as attractive ventures for foreign investment (Raynard and Forstater, 2002). SMEs in developed and less developed countries, as in other countries, are however still facing a number of difficulties and obstacles that are impeding and complicating their operations and growth.

5.1 The role of SMEs in South Africa

The democratically elected Government of South Africa realized as early as 1995 the importance of SMEs to the economy. Trevor Manuel, then Minister of Trade and Industry, clearly articulated on this issue when he said: "With millions of South Africans unemployed and underemployed, the Government has no option but to give its full attention to the task of job creation, and generating sustainable and equitable growth. Small, medium and micro-enterprises represent an important vehicle to address the challenges of job creation, economic growth and equity in our country. We believe that the real engine of sustainable and equitable growth in this country is the private sector. We are committed to doing all we can to help create an environment in which businesses can get on with their job." (Extracts from the

White Paper on National Strategy for the Development and Promotion of Small Business in South Africa).

In South Africa, SMEs account for about 91% of the formal business entities, contributing between 50 and 57% of GDP, providing almost 60% of employment, (Kungolo, 2010). A study by the Competition Commission (2004) estimated that 99.3% of South African businesses were SMEs and that these SMEs accounted for 53.9% of total employment and contributed 34.8% to GDP (NCR, 2011).

SME activity contributes to poverty reduction. SMEs are often located in geographical areas outside of the typical large urban centres. Economic activity outside of the major metropolitan areas leads to job creation helping reduce the poverty of rural areas. Not every SME is in a non-metro area, of course, but both non-metro and metro area SMEs assist with poverty reduction through employment, training and softer social benefits such as Corporate Social Investment.

Aside from these strengths, SMEs have established a successful track record globally in nurturing entrepreneurship and innovation, and serving as attractive ventures for foreign investment (Raynard and Forstater, 2002). From the socio-economic development viewpoint, SMEs provide a variety of benefits (Advani, 1997). SMEs can adapt easily to market conditions and they can withstand adverse economic conditions given their flexible nature. They are more labour intensive than larger firms and they have lower capital costs associated with job creation. They play critical roles to ensure income stability, employment and economic growth (Liedholm and Mead, 1987; Schmitz, 1995).

In a World Bank paper on the subject, four important drivers are identified, which support current thinking around the importance of SMEs in the broader structure of economies:
* SMEs are the engine of growth;
* SMEs are essential for a competitive and efficient market;
* SMEs are critical for poverty reduction; and
* SMEs play a particularly important role in developing countries.

Any sector creating 50% of the new jobs in an economy needs to be nurtured.

SMEs in South Africa play a massively important role. SMEs are better placed to take advantage of the deregulating sector, and are nimbler and hungrier than their corporate peers. This is great news for the general public, as competitiveness increases, and ultimately, the economy is driven to a more efficient and productive space. SMEs are however struggling, and getting very little love from policymakers and corporate giants in South Africa.

According to Tesfayohannes (2000), industrial development based on SMEs is capable of countering three important evils simultaneously, namely: growing unemployment, persistent inequalities and mass migration to cities - all of which are prevalent in South Africa. In support of the above sentiment, Raynard and Forstater (2002) state that for developing countries, such as South Africa, integration into the global economy through economic liberalization and deregulation is seen as the best way to overcome poverty and inequality. According to Luetkenhorst (2004), SMEs are the lifeblood of most economies, because, on average, they represent over 90% of enterprises and account for approximately 50–60% of employment at a national level. Furthermore, he asserts that, with respect to the

developmental contribution of SMEs, there appears to be general consensus, *inter alia,* on the following points:

- SMEs tend to employ more labour-intensive production processes than larger firms.
- Countries with a high share of small enterprises have succeeded in making the income distribution more equitable.
- SMEs support the building up of systemic productive capacities. They also help to absorb productive resources at all levels of the economy and contribute towards the creation of strong economic systems in which small and large enterprises are interlinked.
- SMEs play a pivotal role in transforming agriculture-based economies into industrial-based economies, as they provide opportunities for value-adding processing activities which can generate sustainable livelihoods.
- SMEs are the seedbed for entrepreneurship development, innovation and risk taking behaviour and provide the foundation for long-term growth and the progression towards larger enterprises (Luetkenhorst, 2004).
- The average capital cost of a job created in the SME sector is lower than in the big business sector.
- They provide opportunities for aspiring entrepreneurs, especially those who are unemployed, under-employed or retrenched.
- Workers at the lower end of the continuum often require limited or no skills training; they usually learn their skills on the job.
- Sub-contracting by large enterprises to SMEs lends flexibility to the latter's production processes.

Successful SMEs absorb not only a significant part of the unemployed labour force, but also reduce crime and government expenditure on security and legal services. The sector is one of the most important vehicles through which low-income people can escape poverty. With limited skills and education to compete for formal sector jobs, these men and women find economic opportunities in micro enterprise as business owners and employees. Although their individual social and environmental impacts are small, the cumulative impacts of SMEs are highly significant. As large enterprises have restructured and downsized small, medium and micro enterprises (SMEs) have come to play an increasingly important role in South Africa's economy and development.

Unless South Africa succeeds in promoting SMEs, the country will remain saddled with a significant unemployment problem, resulting in excessive crime in its various manifestations. Furthermore, creating SMEs is one of the most effective ways of economically empowering the previously disadvantaged black population (DTI, 2001). In light of the above mentioned, government should, at national, provincial and local level vigorously promote the development of small businesses.

6   CHALLENGES FACING SMES

Despite the acknowledged importance and contribution of SMEs to economic growth, SMEs across the globe and in South Africa in particular, are still faced with numerous challenges that inhibit entrepreneurial growth. These include: a lack of management skills, finance and obtaining credit, start-up costs, licensing and registration, access to markets and developing relationships with customers, appropriate technology and low production capacity, recognition by large companies, regulatory constraints, complying with all the legislative requirements of the country, government bureaucracy, lacking the necessary information

about foreign markets, little access to international partners, limited international marketing experience, poor quality control, product standardisation, and support for the role that they play in economic development, (WTO, 1998; Ntsika, 1999; DTI, 2002; Gaomab, 2004; ABSA, 2005; SMBDCI, 2005). The SMEs sector does not always get the required support from the concerned government departments, banking sector, financial institutions, and corporate sector, (SMBDCI, 2005).

The increasing penetration of China in the African market has also brought about several negative consequences. Chinese SMEs are likely to bring over their own workers, and thus "new" business does not contribute to local job creation. Secondly, the Chinese do not trust local systems; for example, they do not trust the local banking system, so they are likely to send profits back to China instead of reinvesting in the host countries. Chinese SMEs lack an understanding of African business, as they do not try to integrate into the host countries (Gu, 2009). The most significant consequence of a strong presence of Chinese SMEs is that it forces local firms out of business. The penetration of Chinese companies therefore threatens to undermine the development of South African SMEs.

7   PROMOTION OF SME'S BY THE SA GOVERNMENT

The South African government is fully aware of the importance of SMEs and a framework for SME support and development has been developed. The SME sector of the economy is actively promoted by a number of initiatives, including:

The National Small Business Act of 1996, which defines SMEs and provides for the establishment of the National Small Business Council and the Ntsika Enterprise Promotion Agency (Ntsika), Khula Enterprise Finance which has a mandate to improve the SME sector's access to finance, Skills Development programme, which was launched by the government in 1998 to assist SMEs with two of the challenges that they face, "a lack of management skills" and "developing relationships with customers".

The Integrated Small Business Development Strategy (DTI, 2005) identifies a number of institutions that have important roles in the implementation of the strategy. These agencies (which include both dedicated SME support agencies and institutions with broader and related functions) are as follows: Small Enterprise Development Agency (SEDA), South African Micro-Finance Apex Fund (SAMAF), Khula Enterprise Finance Limited, Umsobomvu Youth Fund (UYF), National Empowerment Fund (NEF), Land Bank, and Mafisa. Some of these have operated more effectively than others, and the Strategy identifies the need to improve coordination both within government and between support agencies in order to improve implementation (the dti, 2005).

8   CONCLUSION

The Department of Trade & Industry (DTI) is of the view that SMEs play a far more important role in developing economies, such as South Africa, than in developed countries, since they make a significant contribution to socio-political stability. Successful SMEs absorb not only a significant part of the unemployed labour force, but also reduce crime and government expenditure on security and legal services. Unless South Africa succeeds in promoting SMEs, the country will remain saddled with the significant unemployment problem, resulting in poverty and excessive crime in its various manifestations. Furthermore, creating SMEs is one of the most effective ways of economically empowering the previously disadvantaged black population (DTI, 2001). In light of the above mentioned, the state, at a

national, provincial and local level should vigorously promote the development of small businesses.

Despite their importance, SMEs face considerable challenges that inhibit their growth. The study revealed that statistics on small business in South Africa is inadequate with no official repository for data on the SME sector. Studies, when they are conducted, are conducted sporadically and statistics derived from numerous sources making it difficult to put together the pieces from different data sources. In order to have effective interventions, it is important to have an understanding of the SME sector, the challenges it faces and the capacity it has to deal with those challenges.

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ANALYSIS OF STRATEGIC OBJECTIVES AND THEIR IMPORTANCE TO ENTREPRENEURS IN CROATIA

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ABSTRACT
In Croatia, as well as in many transition countries, many companies were unprepared for the negative effects that occurred after global economy crises in 2008. In the current harsh economic conditions, entrepreneurs are forced to reconsider their ways of doing business, and to determine its strategic objectives and their importance for survival of businesses. The aim of this paper is to analyze empirical research and to determine which strategic objectives entrepreneurs consider most important for the success of the business. The research was conducted using a questionnaire on a sample of companies from Croatia.

Keywords: Business performance, Entrepreneurship, Management, Strategic objectives

1 INTRODUCTION

A strategy represents a general framework for decision-making process in business enterprises. Today we recognize the global strategy on entrepreneurial or corporate level, which represents the highest level of management and resulting with selected concept of strategic development which includes global goals, identifying strategic business areas, containing the global financial development projection and determines other goals. On the lower level is a business strategy that is relevant to all market segments which produce profits and are located within the individual organizational units. These strategies are designed to substrate global strategy. The task of management is, at this level, to transfer the concept and tasks of global strategy at business level of an appropriate organizational unit. Third classification distinguishes functional strategies that are used for the implementation of the tasks and goals of global business strategy within individual functional areas. Management of organizational units is responsible, under the annual plans, for the execution of strategic plans for the business. These are essentially operational strategies that are common as well as division of authority and responsibilities in the processes related to the technical innovation.

Strategic advantages of enterprises are constantly competing in product improvement, cost reduction, and a higher level of service delivery to customers. Fighting for survival and business growth is continuous and companies compete to their competitive advantage. The business strategy of entrepreneurs should develop and capitalize on these advantages in the market.

2 ANALYSIS OF EMPIRICAL RESEARCH

Scientific objective of this paper is to determine which strategic objectives, according to the entrepreneurs, hold the key to business success. The research wants to contribute to the development of knowledge about the importance of setting up strategic business objectives as a source of competitive advantage, but also as a way of shaping a modern and successful entrepreneur. Empirical research was conducted on a sample of companies in Croatia. The survey questionnaire was sent to 320 companies that have been selected at random. The questionnaire was answered by 123 respondents which makes the return rate of 38.43 percent. The collected data were processed using the statistical program SPSS 20.

The following tables and graphs indicate the structure of the analyzed companies according to baseline characteristics: basic activity, form of ownership, and an analysis of the market in which the company operates.

Table 1 shows the structure of the enterprises considering its core business. Most of the respondents, 35.0 percent, are engaged in wholesale and retail trade. Immediately after the trade activities is the manufacturing industry with 15.4 percent of the surveyed companies. In third place is a construction activity which makes 8.9 percent of the analyzed companies.

Table 1: Structure of enterprises by industry (analysis of the author)

Activity	Number	%
Agriculture, forestry and fishing industry	3	2,4
Manufacturing industry	19	15,4
Electricity, gas, steam and air conditioning industry	1	0,8
Construction industry	11	8,9
Wholesale and retail trade, repair of motor vehicles and motorcycles	43	35,0
Transport and storage industry	4	3,3
Accommodation providers and food service industry	9	7,3
Information and communication industry	7	5,7
Financial and insurance activities	7	5,7
Real estate industry	3	2,4
Professional, scientific and technical activities	7	5,7
Education industry	0	0,0
Human health and social care industry	1	0,8
Arts, entertainment and recreation industry	1	0,8
Other service activities	7	5,7
Total	**123**	**100**

Chart 1 shows the ownership structure of the analyzed enterprises. The analysis shows that enterprises are predominantly private owned where there are no state or mixed ownership. In the sample there is 81 percent of privately domestic owned enterprises, 4 percent of enterprises in the private shareholders, and 14 percent of enterprises in the private foreign ownership.

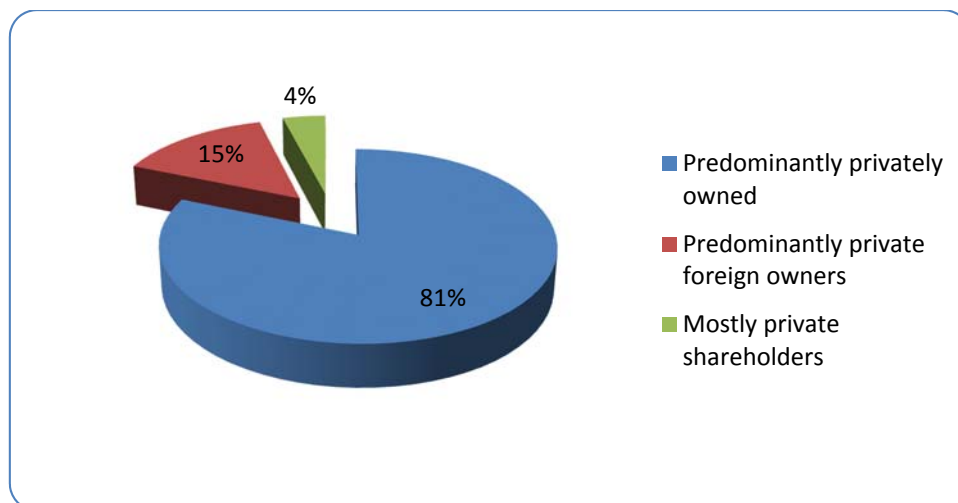**Entrepreneurship Between Creativity and Bureaucracy**

Chart 1: The ownership structure of the analyzed enterprises (analysis of the author)

It is interesting to notice, Chart 2, that most of the companies operating in the local market, 51 percent, followed by companies that operate only on the national market, 22 percent, while companies that operate in regional markets constitute almost one fifth of the total number of respondents. Companies that are active in the international market make up 8 percent of the surveyed companies. In this survey question, the local market is defined as the one at the county level, the national market is defined as a market in the state, the regional market is defined as the market of former Yugoslavia and the international market is defined as the market worldwide.
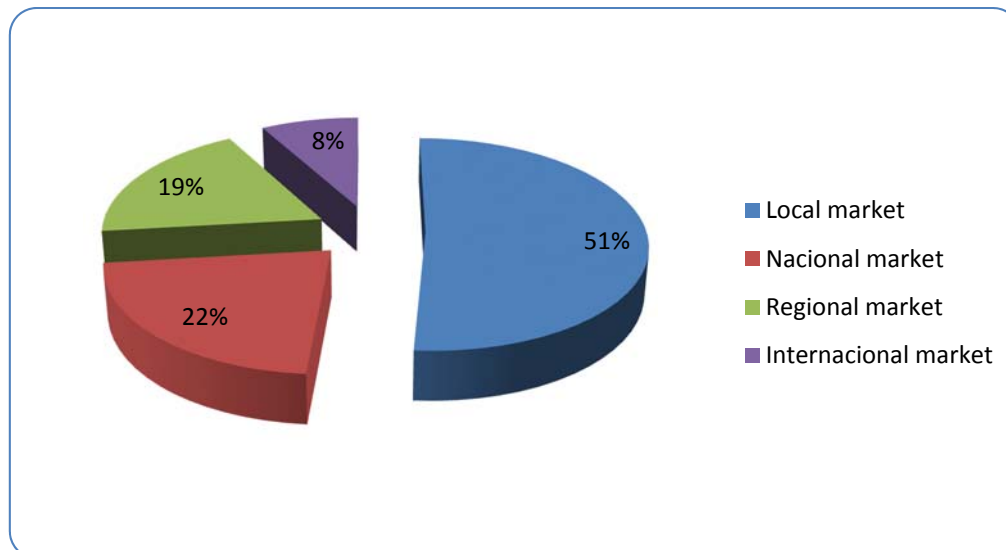

Chart 2: Structure of the companies with regard to the operating markets (analysis of the author)

Table 2 presents data on the characteristics of the sample considering age and sex structure of the respondents, their qualifications, and position within the company. Most of the are represented between the age 36 to 50 years (47.15 percent), 34.95 percent of the respondents were by the age of 35 years, while 17.9 percent of respondents are between the ages of 51 and 65 years. Furthermore, most of the respondents are male (55.3 percent). Given the degree

most of the respondents have a Bachelor degree (58.53 percent), 37.39 percent of respondents have a high school diploma, and 3.3 percent of responder's professional Master's degree. Only 1 responder has PhD, and none of the respondents has a Master's of Science degree. Table 2 also analyzes the structure of respondents according to the length of working life in the company. Most of the respondents have 5-10 years of working experience (37.4 percent), followed by respondents with 2 to 5 years of working experience (28.5 percent), while the proportion of respondents under 2 years of working experience is 15.4 percent. Those responders with 10 to 20 years of work life make 14.6 percent, while only 4.1 percent of respondents have work life in the company more than 20 years. With regard to the position within the company 50.4 percent of respondents were business owners, while the vast majority of respondents belonging to middle and lower level management.

Table 2: Structure of enterprises by industry (analysis of the author)

		Absolute frequency	Percentage of frequency
Age	**Up to 35 years**	43	34,95%
	36-50 years	58	47,2%
	51-65 years	22	17,88%
	Over 65 years	0	0,0%
Sex	**Male**	68	55,3%
	Female	55	44,7%
Education qualifications	**High school**	46	37,39%
	Bachelor Degree	72	58,53%
	Professional master's Degree	4	3,3%
	Master of Science	0	0,0%
	Doctorate of Science	1	0,8%
Working experience	**Up to 2 years**	19	15,4%
	2-5 years	35	28,5%
	5-10 years	46	37,4%
	10-20 years	18	14,6%
	Over 20 years	5	4,1%
Position in company	**Owner**	62	50,4%
	Member of the Supervisory Board	2	1,6%
	Member of the Board	7	5,7%
	Middle level management	39	31,7%
	Lower level management	11	8,9%
	Employee	2	1,6%

The importance of strategic objectives in the company was examined by using Liker scale from 1 to 5. Respondents were asked to estimate how much a particular strategic objective is important for their companies. The score of 1 means that the objective is not important for the company and the score of 5 means that the objective is extremely important for the company. The following charts show the most important strategic objectives for the companies in Croatia.

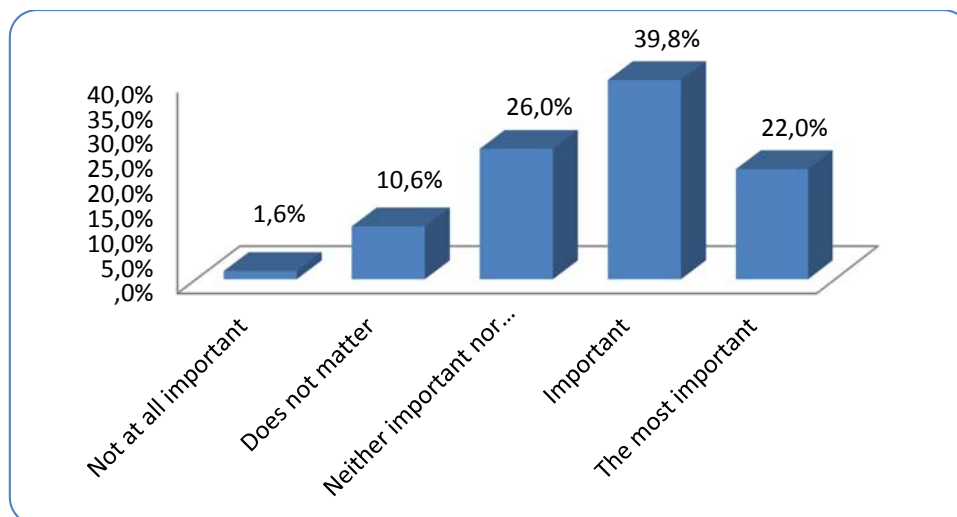**Entrepreneurship Between Creativity and Bureaucracy**

Chart 3: The importance of the strategic objective of creating long-term relationships with customers (analysis of the author)

Charts 3, 4 and 5 are showing how the respondents rate the importance of the strategic objectives of the company; "Creating long-term relationships with customers", "Improving the quality of products and services", and "Long-term profitability". With these three objectives most of the respondents felt that these are just the most important strategic objectives for their business enterprise. On average, for the aforementioned strategic objectives, the vast majority of respondents believe that the stated objectives are important or the most important for their business (on average over 60 percent). Through the analysis of these three charts we can conclude that majority of companies nowadays are formed because of the purpose of improving themselves and their communities, because of the creation of long-term relationships with people, and because of the improvement of goods and services in the market. However, the main purpose of almost every company is always the same e.g. profit for owners.
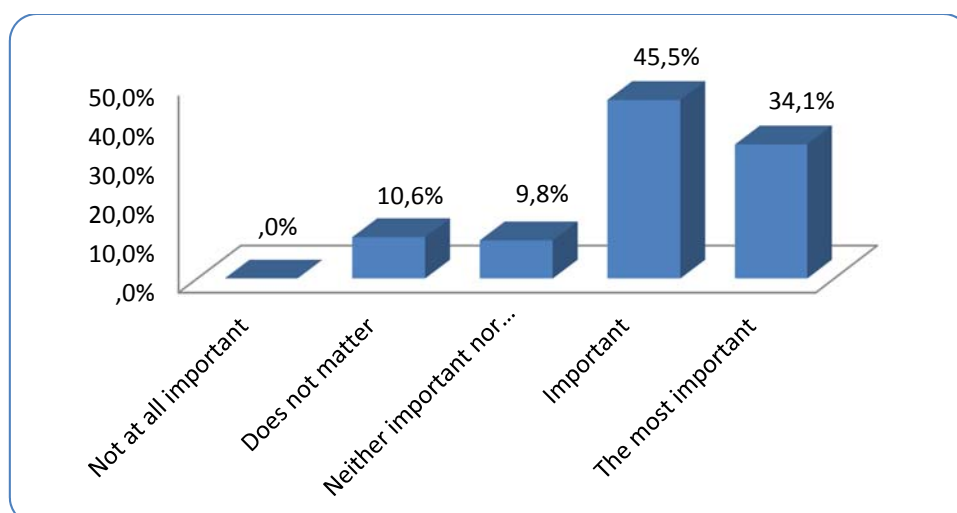

Chart 4: The importance of the strategic objective of improving the quality of products and services (analysis of the author)

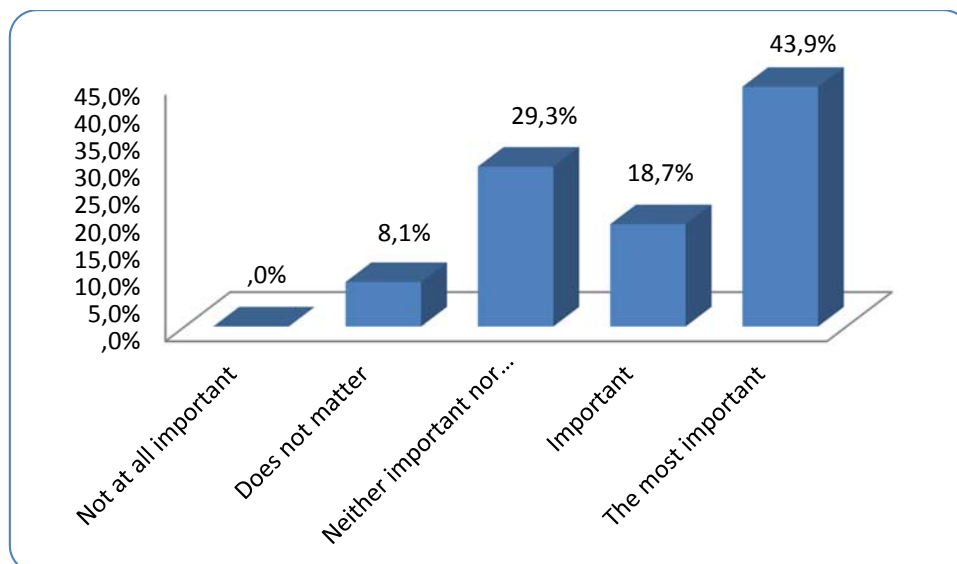**Entrepreneurship Between Creativity and Bureaucracy**

Chart 5: The importance of the strategic objective of long-term profitability (analysis of the author)

The following charts show the less important strategic objectives for the companies in Croatia. On Charts 6 and 7 we see that for the responders the strategic objectives „Increasing challenges" and "Developing our own brand"have very little importance. In both of these strategic objectives very high percentage of respondents think that these objectives are neither important nor unimportant for the company (54.5 and 36.6 percent), i.e., responders do not have formed opinion about these strategic objectives. Furthermore, very small number of responders thinks that these objectives are the most important objectives for their companies (4.1 and 9.8 percent). If we analyze responders who do not matter for these objectives and to whom these objectives represent "not at all important" scale we can see significant percentages (19.5 and 30.9 percent).
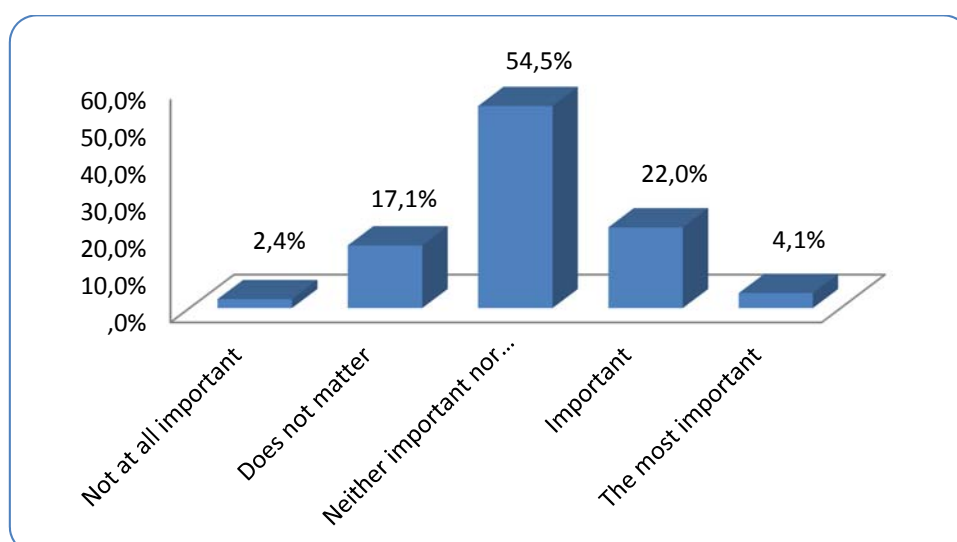

Chart 6: The importance of the strategic objective of increasing challenges (analysis of the author)

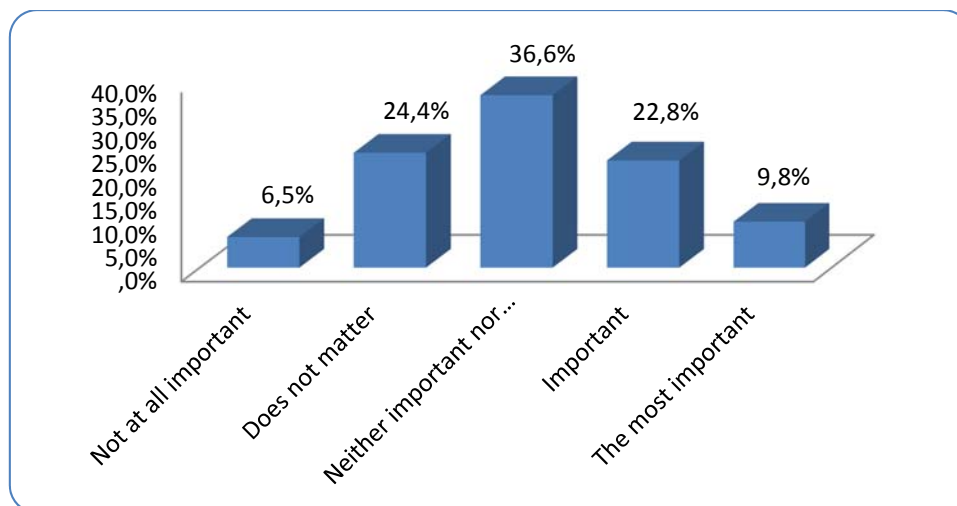**Entrepreneurship Between Creativity and Bureaucracy**

Chart 7: The importance of the strategic objective of developing our own brand (analysis of the author)

Table 3 shows descriptive analysis of the importance of strategic objectives for the companies in Croatia. Besides the measures of mean and dispersion ratio this table provides the values of the coefficient of asymmetry. Asymmetry coefficient is used to determine the distribution of deviations from the normal distribution of variables. According to theory the asymmetry coefficients, analyzed between -1 and +1, indicating that the distribution of these variables approaches a normal distribution. Asymmetry coefficients for all strategic objectives are satisfactory. All analyzed strategic objectives are evaluated at least once with value 5, except the strategic objective „Other" which has the largest score of 4. Six strategic objectives are neither once rated as totally irrelevant and these objectives are: long-term profitability, improvement of product quality, reducing costs in relation to competition, increased customer satisfaction, employee development and satisfaction, and increase market share.

Table 3: Descriptive analysis of the importance of strategic objectives for companies in Croatia (analysis of the author)

	N	Min	Max	Mod	Arithmetic mean	Standard deviation	Asymmetry coefficient
Long-term profitability	123	2	5	5	3,98	1,032	-0,422
Improving the quality of products / services	123	2	5	4	4,03	0,932	-0,869
Reducing costs in relation to the competition	123	2	5	4	3,93	0,791	-0,071
Expanding the diversity of products	123	1	5	3	3,28	0,883	-0,375
Increasing consumer satisfaction	123	2	5	4	3,91	0,859	-0,220
Improving image of the organization	123	1	5	4	3,70	0,983	-0,467
Creating long-term relationships with customers	123	1	5	5	4,07	0,879	-0,512
Development of own brand	123	1	5	3	3,05	1,062	0,068
Taking the lead market position	123	1	5	4	3,69	0,907	-0,218
Development and satisfaction of employees	123	2	5	4	3,74	0,808	-0,152
Increase market share	123	2	5	4	3,63	0,880	-0,088
Increasing challenges	123	1	5	3	3,08	0,806	0,042
Other	123	1	4	1	2,12	1,164	0,457

3 CONCLUSION

Entrepreneurship and entrepreneurial orientation are closely related to strategic management. Although the top management does not impose, it reflects the strategic direction of the behavior of the various levels of management. Integration of entrepreneurship with strategy has two aspects: a strategy for entrepreneurs and entrepreneurial strategy. Strategy for entrepreneurs addresses the needs of developing entrepreneurial activity, while entrepreneurial strategy involves the use of creativity and entrepreneurial thinking in developing the company's strategy. Adaptation to changing business conditions involves the entrepreneurial aspect of business strategy. Strategy can help the company to resolve internal conflicts between integration, flexibility and innovation.

Through conducted research we recognize that all entrepreneurs do not share same opinion about the importance of certain strategic objectives. Companies in Croatia gave the averaged highest grade to strategic goal of creating long-term relationships with customers (4.07). The importance of this objective for the Croatian company points the value of mode (most frequent score 5). The next objective which importance is evaluated on average high score is the strategic objectives of improving the quality of the product (4.03). Furthermore, the most common score for this objective is also 4. It is also interesting to note that the most common value for the objective of "long-term profitability" is 5. It can be concluded that for the majority of Croatian companies the most important is to achieve strategic objective: creating a long-term relationships with customers, improving the quality of products, and goal of long-term profitability.

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INSTITUTIONAL ASPECTS OF CONTROLLING IN SME'S IN NORTHWEST CROATIA

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ABSTRACT
Small and medium size enterprises (SMEs) represent a very important segment of the Croatian economy as is the case in many other countries. That is the main reason for a growing number of studies about the problems they face. The first identified problem is a necessity for adjustment to a turbulent environment. Another important problem is internal weaknesses of SMEs, including errors on the side of management that stand out. Controlling (field which in many aspects overlaps with management accounting in international discourse) and controllers provide support to management by performing various tasks that are important for SMEs. These are the tasks related to the two management subsystems: Planning and control and Information and reporting. However, in many SMEs where these tasks are indeed performed, they are predominantly done by managers themselves, which leads to their overburdening and an increased number of errors. In this paper the emphasis is on institutional aspects of Controlling. We investigate to what extent is Controlling present in SMEs (in institutional sense) and who performs Controlling tasks related to the management subsystems. Since Controlling is mostly developed in the German-speaking countries and most intensive studies about Controlling are carried out in these countries, some of them served as guidance to our study. The study was conducted in Northwest Croatia. The following hypothesis is set out in the paper: Within SMEs in the Varazdin County Controlling is not present in the institutional sense and tasks in the field of Controlling are performed by managers themselves, with the help of employees in finance or accounting/bookkeeping. The results of our empirical research confirm the hypothesis, which means that Controlling tasks are not performed within SMEs in a manner that would enable increased efficiency of management.

Keywords: Controlling, Management accounting, SMEs

1 INTRODUCTION

There are several reasons that influence the success or failure of an enterprise. Some of the influence comes from the environment, where the company can hardly or not at all affect these reasons. However, recognition of environmental factors is important in order to better adapt to them. Business environment is an extremely dynamic one and it is becoming more and more turbulent every day, where many factors affect the performance of a company and goals and strategy it adopts. Such factors are political, economic, social, technological, legislative and ecological (ethical). The second group of reasons for the failure of many companies consists of internal weaknesses. With small and medium size businesses (SMEs) management's weaknesses and errors stand out immensely. Everyday operating jobs in SMEs do not leave enough time to the management for an active managing, directed towards the future. The situation in SMEs is the one where every business day is not characterized by an

action but by a reaction, and planning (if any) and managing are short-term focused. The search for what causes the problems starts only when the business is already heading in the wrong direction, and then it is often too late. Therefore, SMEs often do not operate in line with their potential. It is clear that in a situation like this, with so many factors that a company should take into account, the risks and the chances are closely linked to each other. Adapting to the situation in the environment and overcoming internal weaknesses are essential to the success of SMEs. The answer to the question "how to achieve it?" is in the use of appropriate tools for planning, control and informing, directed towards both operational and strategic area. In doing so, the management of an SME needs professional help and support provided by Controlling and controllers.

Controlling evolved in the recent decades in large companies as a successful response to the problems of their adaptation to internal and external changes. However, Controlling systems that were developed for the needs of large companies are not directly applicable to SMEs. SME requires measures and procedures different from a large company due to the specifics characterizing it i.e. due to a series of differences in comparison with large enterprises. Because of that, there will be differences in the institutional aspects of Controlling between large enterprises and SMSs, meaning differences in organization and the performers of Controlling tasks. In this paper we investigate to what extent is Controlling present in SMEs (in institutional sense) and who performs Controlling tasks related to the management subsystems.

2 RELATED LITERATURE IDENTIFYING THE KEY TASKS OF CONTROLLING AND CONFIRMING THE NEED FOR CONTROLLING IN SMES

Controlling is an English term used in German-speaking countries[1] and refers to "most tasks that would be considered in international discourse as management accounting tasks" (Becker and Messner, 2005, p. 418). Even more accurately, management accounting issues in German-speaking countries can be categorized to ''Kostenrechnung'' (cost accounting) or ''Interne Unternehmensrechnung'' (internal accounting) and ''Controlling'' motivated by what controllers do (Wagenhofer, 2006, pp. 1–2). Following that, many companies in German-speaking countries have Controlling institutionalized (Osmanagic Bedenik, 2007, p. 47). The situation in Croatia is identical, meaning that many large enterprises have Controlling departments. The first important study in the practice of Controlling in large enterprises in Croatia was conducted by Nidzara Osmanagic Bedenik in year 2001, followed by a new research in 2007 without the change in the research methodology, which enabled a comparative analysis of the development of Controlling through this period. Research conducted in year 2007 showed that 74% of large companies in Croatia had Controlling as an organizational unit (Osmanagic Bedenik, 2007, p. 54). This was a significant increase compared to the data from the year 2001 when 53% of large companies had Controlling as an organizational unit. Altogether, Controlling is a young function in companies in Croatia. Research on the specifics of institutional aspects of Controlling in SMEs in Croatia was up to now to the best of our knowledge not conducted.

Controlling in SMEs varies from Controlling in large enterprises both in institutional aspects (organization and carriers of Controlling tasks) and in terms of Controlling instruments used, and can be defined as "a system of planning, information, control and management of

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[1] Refers to Germany, Austria and parts of Switzerland.

important ongoing processes in the company adapted to the company" (Spraul and Oeser, 2004, p. 1). One of the characteristics of SMEs is the situation of owner-manager where an entrepreneur manages the company but also does most administrative tasks, especially when the company is smaller. Given this entire burden on the entrepreneur, it is expected that some management tasks will have to be ignored. In such a situation all management tasks are concentrated and performed by one person or a small group of people, and on them the success of the company depends. Many things depend on the management style of this person - the significance of achieving goals, decision-making, informal relationships among employees, control, delegation of responsibility, attitude towards information, and concern for subordinates. Paternalistic management style prevails in SMEs (Ossadnik et al., 2008, p. 5). Delegating responsibility for decision-making is not a characteristic for this style of management, though the subordinates are consulted and their views taken into account. The final decision is always made by the manager. The mere management style in SMEs can represent a possible obstacle to introducing and applying Controlling. It is noteworthy that the managers are aware of positive implications of making more informed decisions.

The increase in efficiency and effectiveness of management is emphasized as the goal of Controlling. In large enterprises controllers are those employees involved in carrying out the Controlling tasks, giving the management their expertise. The controller is a person that supports management in the execution of his duties, an internal consultant to management, "an employee that executes a specific set of tasks for the manager (e.g. preparation of information on costs, monitoring achievement of results, etc.)" (Weber and Schäffer, 2006, p. 1). Controller's mission from International Group of Controlling (IGC) shows that the key activities associated with the controllers are (International Group of Controlling, 2002):
- Planning,
- Informing/reporting,
- Analyzing/monitoring,
- Control.

In general, Controlling is not only associated to the person called the controller. Controlling tasks should be performed by each manager, particularly because this shortens the reaction time to variances in plans (Horvath & Partners, 2006, p. 297). A prerequisite for a successful performance of Controlling tasks by managers is firstly, a clear definition of Controlling tasks that should be done, and secondly ways in which expert support to them is assured. Expert support to managers is one of the activities of controllers. This expert support can come from external advisors, as is particularly the case with the smaller companies.

Controlling activities that are emphasized when implementing planning activities in SMEs are mainly support with planning and managing of planning process. Key tasks of controllers during the planning process are the design and coordination of plans and budgets, while the content of plans and budgets is the responsibility of management. Planning in SMEs is essential for ensuring good management, but in practice it often happens that planning is not carried out at all. In 2004, The Institute for market research Brainstudio conducted a research on behalf of Bank Austria-Creditanstalt on 500 clients about their planning activities. The research showed that among small businesses nearly 50% of them did not have a defined planning process, and among those who carried out planning, half of them turned that job over to tax advisers (UniCredit Bank Austria, 2004).

Tasks of controlling are all activities that enable achieving the objectives of Controlling, thereby contributing to the achievement of company objectives (Ossadnik et al., 2008, p. 18). Whether SMEs will opt for internal or external carriers of Controlling tasks, when introducing Controlling, depends on several factors (Ossadnik et al., 2008, p. 20):

- Company size (micro, small, medium), and by that on the extent of tasks in the field of Controlling,
- Whether the tasks need to be done only occasionally, i.e. are they of limited duration,
- The costs of internal and external experts in Controlling,
- Availability of professionals in the labor market,
- The desire for a neutral advisor.

There is also a possibility to perform Controlling tasks partially from within the company, and partially to engage external experts. In this case one should think about the competences that people, who perform the tasks in the field of Controlling, should have. When asked to specify important characteristics of controllers in SMEs, the respondents who themselves carried out Controlling tasks is SMEs, mentioned the following once (Ruda et al., 2008, pp. 51–53):

- Analytical thinking
- Power to persuade
- Ability to impose authority
- Social competences (ability for team work, ability for conflict solving, ability for consensus realization).

In a survey conducted by Ruda et al. (2008, pp. 50–51) all the respondents identified that reporting and variance analysis are tasks specifically designated as controller's tasks. Additionally, operative planning was identified by 78% of respondents as a controller's task, consulting/coaching by 67%, and regulating tasks, investment analysis and internal accounting by 44% of respondents.

The study by Deloitte Mittelstands-Institute showed that there is a difference in implementation of Controlling tasks between SMEs managed by their owners and managed by professional managers (Deloitte & Tousche, 2008, p. 8). Only 50% of owner-managed companies employ a person specialized for Controlling tasks compared to 90% of professionally managed SMEs. In owner-managed companies the owner-managers perform the Controlling tasks themselves in 32% of the observed cases, in 20% of cases these tasks are also done by other managers in the company, and in 6% they are done by external performers of Controlling tasks. In professionally managed companies, besides controllers, Controlling tasks are performed by different managers within the company in 38% of cases and by external professionals in 4% of the cases.

Both, scientists and experts from the practice, agree that Controlling is not a function reserved exclusively for the large companies. Empirical research confirms that controlling in SMEs provides expert support to managers, thus contributing to their disburdening, to a higher quality of managing and better performance of an enterprise. For example, in the research conducted on SMEs in Osnabrück-Emsland region in Germany, 95% of respondents confirmed that Controlling is important or very important for the success of the enterprise (Ossadnik et al., 2008, pp. 59–60). In most companies the main performers of Controlling tasks were managers (53%), additionally the Controlling tasks were also performed by Controlling departments/controllers (35%) or accounting/bookkeeping department (34%) (Ossadnik et al., 2008, pp. 67–68).

All above mentioned studies confirm that applying Controlling in SMEs is very important for their success and long-term survival on the market.

3 RESEARCH OF CONTROLLING TASKS IN SMEs IN THE VARAZDIN COUNTY

Controlling in Croatia is at a lower stage of development than in the German-speaking countries. Therefore, our research could not be as detailed when we assumed that Controlling is not applied in Croatian SMEs to the extent to which it was done in the German-speaking countries. Our objective was to get the first insight in the institutional aspects of Controlling in SMEs in Croatia. That was done through the investigation of the presence of Controlling department within SMEs and the performers of Controlling tasks in SMEs.

3.1 Hypothesis

The following hypothesis is set out in the paper: Within SMEs in Varazdin County Controlling is not present in the institutional sense, and tasks in the field of Controlling are performed by managers themselves with the help of employees in finance or accounting/ bookkeeping departments.

3.2 Selecting a sample

The study was conducted on SMEs in the Varazdin County, Croatia. To identify companies, the database of the Croatian Chamber of Economy was used[2]. The selection criterion was the fact that the company submitted an annual financial report for the year 2008, which was taken as evidence that the company is active. According to this criterion, there were 63 medium-sized enterprises and 2280 small businesses identified in the Varazdin County. 1359 micro-enterprises were excluded from the sample, because their total annual income is under million Croatian kunas[3] and in most cases there was no information about the e-mail address either. A link to the questionnaire was sent to 675 of the remaining 984 SME's who had an active e-mail address (sample consisted of 68.6% of the identified companies). The response rate was 11.85%, as 80 companies in the sample responded to the questionnaire.

3.3 Research

According to Croatian legislation, at the time of research most of the companies that responded to the questionnaire were classified as micro enterprises (Table 1). Based on that, it cannot be expected that Controlling department is present in high percentage within the investigated companies.

Table 1: Firms according to their size

Category	Total revenues in year 2008 (in Croatian kunas)	Number of firms (N=80)	Percentage
Micro	1-14 million	61	76%
Small	14-54 million	5	6%
Medium	more than 54 million	14	18%
	Total:	80	100%

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[2] Database available at http://www1.biznet.hr/HgkWeb/do/advsearch.

[3] Around € 130.000 which is insignificant.

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The structure of the surveyed companies by industry is shown in Table 2.

Table 2: Firms according to industry

Industry	Number of firms (N=80)	Percentage
Services	24	30%
Wholesale	19	24%
Production	19	24%
Construction and architecture	13	16%
Retail	5	6%
Total:	80	100%

SMEs are frequently managed by their owners. The study shows that 60 out of 80 (75%) questioned managers who responded to our questionnaire were also owners or co-owners of the companies. Additionally, there was a question for the remaining 25% of the respondents (case where the respondent is not the owner/co-owner) whether the owners/co-owners are a part of the company management. Final results show that in total, in almost 87% of the companies there is a situation of owner-managers.

Part of general questions consisted of questions about the organizational structure, whether the company is a part of a group of companies and if so in what way. The goal of the organizational structure questions was to determine how the companies built and defined their formal organizational structure, having in mind that the organizational structure affects the existence of Controlling in institutional terms. It is well known that the degree of organization's formalization is directly related to the size and complexity of companies (large and complex enterprises must have more formalized organizational structure than small businesses (Kolaković, 2006, p. 41)). Investigated companies have largely been organized by function (45%) or there was no special way of formal organization (40%) (Figure 1). Therefore, we expected that Controlling would not be significantly present in the institutional sense.
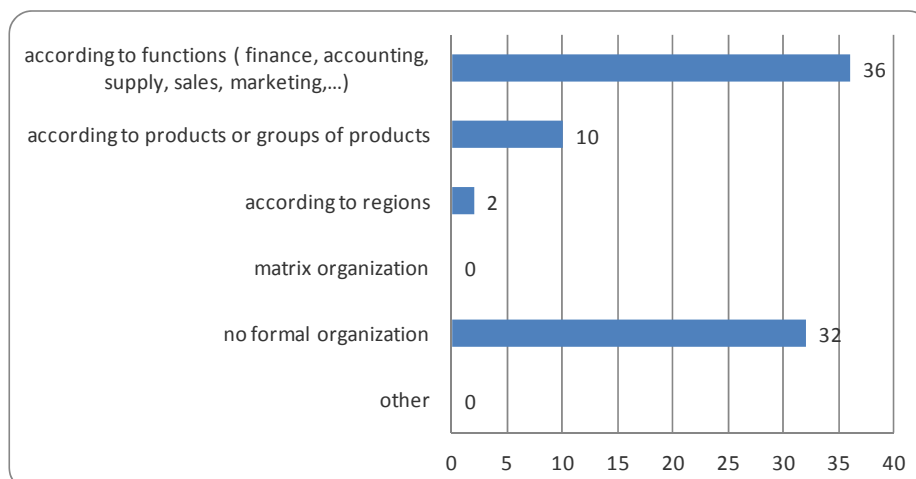

Figure 1: Formal organizational structure

11 companies or 14% of them were a member of a group and in all the cases they operated as a subsidiary.

Moreover, the respondents were asked about the existence of accounting/bookkeeping, finance and Controlling department in the company, and the number of employees in them. The results are shown in Table 3:

- In 54% of companies there is an accounting / bookkeeping department
- 39% of companies have a finance department
- Only 11% of companies have a Controlling department.

Table 3: Number of employees in departments

No. of employees per department	No. of firms: Accounting/ bookkeeping department (N=80)	Pct	No. of firms: finance dept. (N=80)	Pct	No. of firms: controlling dept. (N=80)	Pct
no such department	37	46%	49	61%	71	89%
1	17	21%	18	23%	9	11%
2	4	5%	11	14%	0	0%
3	8	10%	0	0%	0	0%
4	9	11%	0	0%	0	0%
5	0	0%	2	3%	0	0%
more than 5	5	6%	0	0%	0	0%
Total:	**80**	**100%**	**80**	**100%**	**80**	**100%**

Interestingly, Controlling department only exists in 9 companies, among which five are independent companies, and four are subsidiaries. In each of them where the controlling department exists, the department itself only has one employee. Subsidiaries of larger firms are more likely to have a Controlling department, since Controlling in large companies, both in German-speaking countries and in Croatia, is highly present in the institutional sense.

Given that the size of companies is one of the factors influencing the presence of individual departments, in an institutional sense, the analysis of the absence of individual departments associated with company size (micro, small, and medium) is presented in table 4.

Table 4: Absence of certain departments depending on the size of the company

	Absence of accounting dept. (N=37)	Pct	Percentage of the total No. of companies of the same size.	Absence of finance dept. (N=49)	Pct	Percentage of the total No. of companies of the same size.	Absence of Controlling dept. (N=71)	Pct	Percentage of the total No. of companies of the same size.
Micro (N=61)	37	100%	61%	46	94%	75%	61	86%	100%
Small (N=5)	0	0%	0%	0	0%	0%	2	3%	40%
Medium (N=14)	0	0%	0%	3	6%	21%	8	11%	57%
Total:	37	100%	-	49	100%	-	71	100%	-

The analysis shows that all micro-enterprises, 40% of small and 57% of medium businesses do not have a Controlling department. This largely confirmed the first part of the hypothesis that "Within SMEs in Varazdin County Controlling is not present in the institutional sense".

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The results of our study coincide with the research results from the German-speaking countries, which show that the presence of Controlling in institutional sense rises with the growth of the company. The possibility for further research is to study the frequency of Controlling department presence based on SMEs segmentation according to the total revenue for the whole of Croatia.

The question that followed was about who performs the Controlling tasks within the company. It was expected that besides the management the employees from some of the above mentioned departments are responsible for the Controlling tasks at a large extent. To ease the answer to this question some of the most common tasks of Controlling were mentioned in the questionnaire (business planning, budgeting, control of plan implementation, variance analysis, cost analysis, an analysis of financial ratios etc.).

The results show (Table 5) that the tasks in the field of Controlling in SMEs are generally performed by the management (79% of cases), with the help of accounting professionals, either within the company (21%) or from external accounting services (18%), and to a lesser extent with the help of employees in Controlling (11%) or finance (11%) department. Furthermore, companies rarely use external advisers other than lawyers and bankers (Table 6) and external accounting services (Table 5). Specialized consultants, whose services are often subsidized for SMEs, as is the case with the Consultant Network Project[4] in Croatia, could be a significant source of advice in the Controlling area, especially for the smallest companies.

Table 5: Performers of tasks in the field of controlling

Tasks from the field of controlling are carried out by:	*No. of companies N= 80*	*Percentage*
Management	63	79%
Employees in the accounting/bookkeeping dept.	17	21%
External accounting service	14	18%
Employees in controlling dept.	9	11%
Employees in finance dept.	9	11%
Controlling tasks are not performed in our company	1	1%

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[4] More about the project available on http://www.hamag.hr/en/consultant-services-co-financing.html.

Table 6: Use of Advisory services

Adviser	No. of companies (N=44)	Pct
Lawyers	23	52%
Bankers	13	30%
Auditors	5	11%
State Agencies	3	7%
Croatian Chamber of Economy	3	7%
Consultants	2	5%
Faculty of Mechanical Engineering	2	5%
Local Authorities	1	2%
Tax advisers	1	2%
Accounting and Finance Associations	1	2%
Ministries	1	2%

The answers confirmed the second part of the hypothesis that "tasks in the field of Controlling are performed by managers themselves with the help of employees in the finance or accounting/ bookkeeping department".

The results clearly show that managers in SMEs in Croatia perform Controlling tasks in a higher percentage than shown in studies from the German-speaking countries. With all these additional tasks they carry a higher overall burden.

4 CONCLUSION

Successful adaptation of SMEs to the situation in the environment and overcoming internal weaknesses are essential to the success of SMEs. These can be achieved through the use of appropriate tools for planning, control and informing directed on both operational and strategic area with a professional help and support provided by Controlling and controllers. Because of specific characteristics of SMEs there are differences in the institutional aspects of Controlling between large enterprises and SMEs, meaning, differences in organization and the performers of Controlling tasks. The existence of either Controlling department or a person called 'controller' is not a necessity for every SME. Managers themselves should perform Controlling tasks to a certain extent because that shortens the reaction time in different business situations. One of the frequent characteristics of SMEs is the situation of owner-manager and the performance of Controlling tasks by managers in such a situation is even more emphasized. What managers need to have is knowledge about the business and expert help from either, controllers within the company or external advisers.

The topics that were investigated on a sample of SMEs from northwest Croatia were the existence of Controlling in the institutional sense and the carriers of Controlling tasks. The results show that Controlling is not heavily present in the institutional sense: no micro enterprise and a very low percentage of small and medium companies have Controlling departments. This topic was additionally investigated according to company size which confirmed that the institutional presence of Controlling rises with the growth of a company. This result coincides with the studies from German-speaking countries. Main performers of Controlling tasks in investigated SMEs are managers themselves. They perform these tasks with the help of the employees from accounting/bookkeeping and finance department since Controlling department is present in just several companies. Therefore it can be concluded that the hypothesis set in the paper was confirmed.

However, it is evident that managers in Croatian SMEs perform Controlling tasks in higher percentage than their German counterparts. To lower the managers' burden, additional expert consultant help should be considered. For SMEs in Croatia, a most efficient combination would be the one with an internal performer of Controlling tasks (besides management those are employees in accounting/bookkeeping or finance department if there is no Controlling department) combined with the external advising services.

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THE ROLE OF SME-s TOWARDS ECONOMIC GROWTH OF ALBANIA: IS THEIR GROWTH A SURE INDICATOR OF A STRONG ECONOMY?

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ABSTRACT
Widely is accepted by economic theories that the promoter of a country's economy is the entrepreneurship. Those peoples, with their own ideas, in order to maximize profits, tends to up the ratio of the employment's country. This of course, creates the premise for raising the standard of living of households, but if the national consume remain constant, then the case is an open discussion. By this point of view, the aim of the article is to know the role of the Albanian SMEs into economic growth and also in the standard of living of households. Sure, their challenges or opportunities by Albanian reality mark their success or failure.

Keywords: *Consume, Economic growth, Employment, Welfare*

1 INTORDUCTION

Support and development of SMEs in Albania economy is and should be the main focus of monetary and fiscal policies undertaken by the government. That's because by what the SME means, especially based in the criteria of employees number, about 95% of the Albanian enterprises are classified as SME. Their development automatically leads to the creation of an stable economy situation, when the aim is to be such that over time.

The stimulation of SMEs is necessary because:
1) First, their best performance stimulate the desire of entrepreneurs to recapitalized their profits,
2) This affects the creations of the new business or in the enlargement of those actual,
3) The rate of employment has to be increased and as consequence, the standard of living of Albanian families will be increased,
4) Profits/losses of SMEs, is directly related to individual/individuals highlight their entrepreneurial skills,
5) The commercial cooperation among countries tends to stress their relations benefiting by the comparative advantages that they have,
6) The economic growth of the country, also based on the economic models shows that will be depend on the development of SMEs,
7) Unfavorable situations of SMEs brings political and economic instability in the country,
8) By having in focus the development of SMEs, labor markets will be more efficient by reducing informality,
9) The underground economy will be reduced by the existence of powerful SMEs.

Albania during the last decade has taken considerable steps to improve the business environment. Best practice in this area have come by the on-line business register, reducing in this manner the costs of business registration. On line services for the business are drawing for the first time in the National Strategy of Business in the 2008, but was fully implemented to the end of 2010. Strategy enables transparency and facilities for the business, especially in the payment of taxes via on line procedures. Those procedures avoid the bureaucracy costs undertaken before by business, making the things more easy. During the year 2005 until 2009 the situation seems to be favorable for the entrepreneurs, related to the data on the following Table 1.

Table 1: The employment in the Albanian SMEs and their added value (Eurostat, 2012)

	Number of Enterprises			Employment			Value added		
	Albania		EU27	Albania		EU27	Albania		EU27
	Number	Share	Share	Number	Share	Share	Billion €	Share	Share
Micro	66.166	95,8%	92,0%	109.894	45,9%	29,5%	0,55	24,7%	21,4%
Small	2.386	3,5%	6,7%	45.720	19,1%	20,5%	0,41	18,4%	19,0%
Medium-sized	432	0,6%	1,1%	40.393	16,9%	16,9%	0,31	13,9%	18,1%
SMEs	**68.984**	**99,9%**	**99,8%**	**196.007**	**81,8%**	**67,0%**	**1,27**	**57,0%**	**58,5%**
Large	54	0,1%	0,2%	43.538	18,2%	33,0%	0,96	43,0%	41,5%
Total	**69.038**	**100,0%**	**100,0%**	**239.545**	**100,0%**	**100,0%**	**2,23**	**100,0%**	**100,0%**

The growth of Albanian SMEs for 2008 results more higher than the European average of 0.10%. Moreover, the level of employment ,as a key factor, is greater than the European average with a difference by 22%. Added value of Albanian SMEs seems to be more lower than the average of European countries by 2.63%.

Concerning in the data of table 1, the number of SME in Albania has increased affecting the growth of employment regardless of the value added in the economy turns out to be lower than the average of SMEs in Europe. Thinking about this, brings in mind that the economy game needs pure rules. By this point of view, the role of state is unquestionable.

However, most business from changes in taxes procedures were unprepared, and such initiatives enlivened some specific profession like accountant/economist making them more desirable by the young peoples. They creates the necessary facilities related to the tax business liabilities since they tend to used more than other generation the computer.

Based on tax liabilities, Albania creates facilities with regard to tax rates, which appear to be the lowest rates in the region, but still remain above the regional average. During the 2005-2010 this has probably been one of the main factors that led to the raise of new business, coupled with governmental policies open to foreign investments. Their presence in Albania, especially in the fields of energy and hydro brought the raise of rate employment tending to improve the standard of living's peoples in the communities where they are located.

Regional economic crisis of some countries such as Greece, Italy, Spain sure will influence the development of Albanian SMEs, especially of those who are very strong in cooperation with them (fasone industry). By reducing the costs production in Albania, foreign firms

operate here because the price of the labor factor is more cheap than in Europe. The production is exported to the respective markets. Despite the vertical and horizontal integration that may have the Albanian SMEs, the economic situation of the country where most of the income are coming by the remittances, mainly from Italy and Greece, sure will influence their development. How they influence the economy of the country by itself, that's to be taken in consideration.

2 SITUATION OF SMEs IN ALBANIAN REALITY, THEIR CHALLENGES

By the European crisis, where the Albanian consumption is widely depending by remittances, makes the Albanian SMEs to be in difficulties from the absence of market. It's clearly in the high level of bad debts from banks and sharp decline in demand for products/services in the country. According to the Association of Banks in Albania, the level of bad debts is currently 22.7%, an indicator to be taken in consideration, not lower compared with the levels of macroeconomic variables of the country. Since October 2012, bad loans have increased for the month of November 2012 with a rate of 0.3%. Likewise, according to the Association of Banks in Albania, the level of deposits is increased too. The main factor for this, maybe will be the bad security situation in the country where the number of thefts has risen significantly. Bad credit growth may results because:

a) During this period of time, banks have preferred to give more government debt than to private investors,
b) Despite of the reduction in the norm of interest by Bank of Albania, the rate of investment was not significant,
c) The lack of liquidity, especially in the construction sector by which depends many other business, has reduce the confidence of banks that firms will be able to pay their loans,
d) Moreover, the absence of a pure fiscal court which specifically deals with business issues has deteriorated the situation,
e) That's because frauds and absence of sincerity among partners in business-a growing phenomenon, affects the rise of bad loans and lack of investment by the missing profits.
f) Also, those practices result to be followed by banks, which do not required strict procedures in order to get loans. In many case they accept for collateral the capital of firms (machineries, lands etc) making in these manner the situation of firms more gravely.
g) The absence of a fiscal court, addressed especially to fiscal problems, leads to the crawl of such problems- increasing the opportune cost of business and in many case in the bankruptcy of those.

Government challenges remain such steps that reduce this situation. First steps have been thrown by reducing interest rate, but this is insufficient because no increased in investments is shown. The necessary and indispensable is their combination of fiscal measures like tax amnesty facilities needed to be taken again. Also this is to be done with a strong marketing policy and in combination with the reduction of the number of the taxes that the business must do. According to the Doing Business in Albania Report World Bank, 2012 the time taken by business to pay all the taxes is much greater than the European average.

Despite this, is necessary that the environment of the business be clearly and realistic, where the successful business must be growing in order to contribute for the development of the country. This requires such initiatives to increase the responsibilities of firm's administrators

for the actions that they may undertake. The law exists and well designed, but its implementation in reality leaves much to be desired. Corruption affairs starts with the missing responsibilities in cases of frauds. Strengthening the legal system and the reduction of informality, coupled with government support to entrepreneurs, is a safe way for the country's economic development.

3   THE IMPACT OF SMEs IN THE GROWTH OF ALBANIAN ECONOMY

A country is strong if the standard of living of its citizens is high. Their purchasing power depends very much on their income and the level of employment. Based on the data of World Bank for Albania, shows in the table 2 below, we see the impact of independent variables into the income. In the concentration of the different economic sector where the SMEs are focused, we can generate the following regression equation:

Box-Cox transformation of the response with rounded lambda = 0.5
The 95% CI for lambda is (-0.025, 0.745)
Regression Equation
GNI^0.5 = 4.53653 + 0.25947 Industry (%GDP) + 16.0221 Foreign Investments(DFI) + 0.078089 Export (%GDP) - 0.0564479 Import (%GDP) +
15.7592 Remittance + 0.276107 Services (%GDP)

Table 2: Coefficients of the regression model and their values (own source)

Term	Coefficients	SE coefficient	T-value	P-value
Constant	4.5365	14.7216	0.30815	0.763
Industry(%GDP)	0.2595	0.6217	0.41738	0.648
DFI	16.0221	3.2396	4.94575	0.000
Export(%GDP)	0.0781	0.2476	0.31545	0.758
Import(%GDP)	-0.0564	0.0516	-1.09311	0.296
Remittance	15.7592	3.6368	4.33322	0.001
Services(%GDP)	0.2761	0.1131	2.44108	0.031

The model has a good approach because explains the dependence in 98.67% of cases. Decisive factors in national income, based on p-values less than 0.05 (coefficient of error) are:
  ➢ Remittance
  ➢ DFI (Foreign Direct Investment)
  ➢ Services

Entrepreneurship Between Creativity and Bureaucracy

Table 3: The analysis of model variance (own source)

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Regression	6	4185.09	4185.09	697.515	148.078	0.000000
Industry (%GDP)	1	385.89	0.82	0.821	0.174	0.683771
DFI	1	3012.00	115.22	115.220	24.460	0.000339
Export(%GDP)	1	466.23	0.47	0.469	0.100	0.757849
Import(%GDP)	1	51.52	5.63	5.628	1.195	0.295805
Remittance	1	241.37	88.45	88.447	18.777	0.000973
Services(%GDP)	1	28.07	28.07	28.069	5.959	0.031096
Error	12	56.53	56.53	4.710		
Total	18	4241.61				

According to the Table 3 which stress the analysis of the multiple regression, the standard of living depends on the amount of remittances. Normally, crisis in the neighboring countries, even accelerated, will influence this standard. The model shows that DFI play a primary role in the albanian economy. Big ambitious projects in the fields of energy and water resources seems to be key factors. Furthermore, foreign investors are taking advantage by the environmental opportunities with the opening of private school in the regions where they operate. This because, they need the appropriate staff for the maintenance of their investment. This of course, leads to mutual benefit, both for the community of the region and for the foreign investors, increasing human capital and the quality of the life. By the other side, investors benefits are the revenues of school and the reduction of costs production. Despite this fact, the correlation between Albanian GNI and DFI seem to be at low levels (see charts 1 and 2), and Albanian GNI trend is almost constant in the positive scenario.
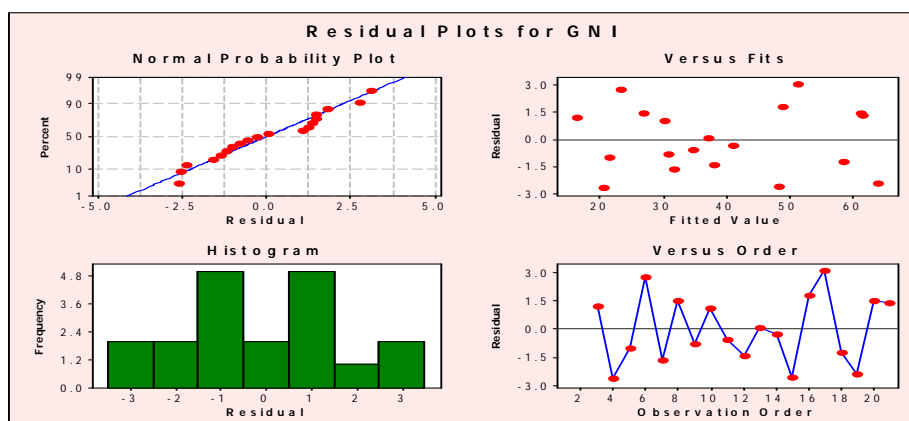

Chart 1: Residual Plots for GNI variable (own source)

Entrepreneurship Between Creativity and Bureaucracy
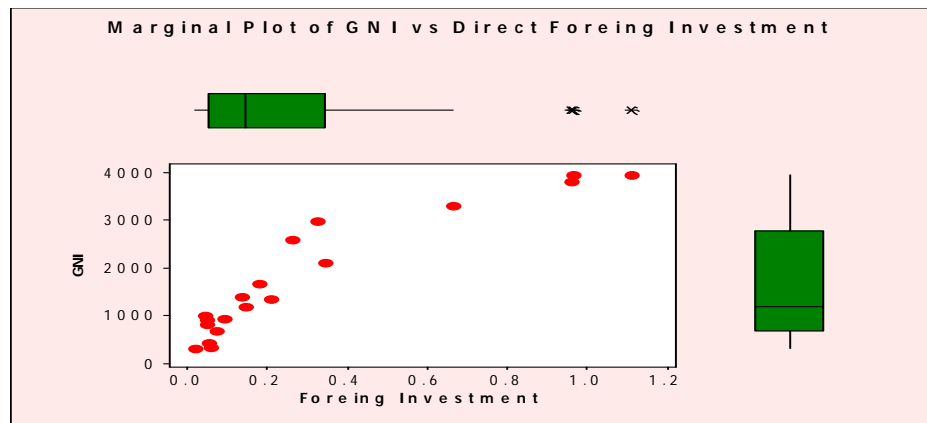

Chart 2: The Marginal distribution of GNI and Foreign Investments-DFI (own source)

The model suggest that services sector is significant at the level of standard's living citizens. To stimulate SMEs operating in this sector, will be a good factor for the economic growth, but sure without ignoring the other vital sector of the economy. It's the duty of the policymakers to well done the strategies in all sector, especially at those where the demand is higher.

4 CONCLUSION

Despite that Albania does not seems to be affected very much by European crisis, dependence on remittances make the crisis present in the country. In order to does not feel the domino effect occurs with dynamic multipliers, the country needs concrete fiscal and monetary policies which should be taken in the right time.

It's important to select those policies that creates synergies among aggregate economic resources. Otherwise, the economic costs will tend to increase. The econometric model suggests that the foreign investments are very important to the growth of economy, but is necessary and indispensable the government support of Albanian SMEs operating especially in the field of services, tourism sector etc. Support can begin with fiscal facilities as tax reduction and related steps.

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THE EFFECTIVENESS OF MARKETING MIX DECISIONS MADE IN THE FAMILY BUSINESSES HAVING INSTITUTIONALIZATION PROBLEMS

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ABSTRACT

This study was designed as theoretical and analyzed characteristics of family companies. In additon, we elaborate on management and administration problems of family-owned companies. The concept of ınstıtutıonalization is defined and announced that the causes of the problems of intitutionalization. In this study, how marketing function is being carried out in family businesses and marketing issues of small businesses are examined. A function that is related to marketing - from pricing to advertising, customer relations to distribution – were discussed in detail. As a result we present a few suggestions about marketing decisions taken in the family businesses. We believe that these suggestions will be important for each company which is defined as a small businesses.

Keywords: Family-owned companies, Institutionalization, Institutionalization problems, Marketing management

1 INTRODUCTION TO FAMILY-OWNED COMPANIES AND THEIR CHARACTERISTICS

In the simplest term, family is the smallest social unit of the society, while the enterprise is an institution established to provide goods or services for people. Family owned enterprises are the profit- oriented social organizations that are established by cognate individuals, in order to produce good or service. The description of family includes emotions, relations, unity, solidarity and support. Furthermore, there are vital elements in family. But an enterprise represents another point; in this point, emotion is replaced by reason, relations are replaced by results and unity and solidarity is replaced by competence (ASO).

For many, the most important two factors of life are family and job. Without a job, it will be hard to start a family. Similarly, without a family, the idea of establishing and progressing a job won't be very essential. The family owned companies including both of these elements simultaneously, are different from those public-associated companies; thus it is a different survey matter. There are two reasons that make family enterprises important. Firstly, they have the opportunity of response to love and working desire simultaneously. If these two elements can be managed successfully, not only the family connections develop, but also its life span extends. The second reason is that, almost throughout the world, it is like the locomotive of national economies. Despite the widespread notion, the family controlled companies have a basic role in economic activities of nations, all over the world (Kırım, 2003). Small and medium-scale companies have an economic and social importance both in Turkey and in the world. At the same time, majority of these companies are family owned. The rate of small and medium-scale enterprises in the over-all enterprises is as following; in

the US 97,1%, in Germany 99,8%, in Japan 99,4% and in Turkey 98,8% (Alayoğlu, 2003, p. 13). On the other hand, the rate of the registered family owned companies is 90% in the USA, 80% in Spain, 99% in Italy, 75% in Britain, 90% in Switzerland and 95% in Turkey.

2 FAMILY-OWNED ENTERPRISES AND MANAGEMENT

As the owners of family companies are manage their own jobs, work hard, and buckle down to the work, the decision making process is faster for them. But when the work reach a specific growth, and beside the work itself, some terms such as management and organization, human resources, efficiency, quality, cost accounting, human relations emerge, some particular problems begin, since the family members are not familiar with these terms and even they consider them as luxury. Such companies can't follow technological developments, and they also can't use advertising and marketing activities efficiently. Moreover, they are not able to face some problems in qualified manufacturing. They can't access to qualified employees, quality control specialists and quality control test equipments. In the terms of small and medium-scale enterprises, vocational training has a great importance. Most of the craftsmen working here, are those risen from the ranks. In terms of success, it's very important to know the work and rise from its rank (Soylu, 2003, p. 2). According to a survey including the family owned companies' administrators, the most usual problems for family enterprise owners are those (for the 85% of them): non- institutionalization, reign, high labour turnover rate, specializing problem, lack of grounding, continuation of previous habits and staff training problems.

2.1 Institutionalization and managerial inadequacy

It is placed on the top amongst the causes of family owned companies' failure. The most vulnerable point of such a company is to confuse family and company terms. In these companies, consanguinity comes into prominence instead of skills and performance, and the family's children are employed even though they are inexperienced. Furthermore, these inexperienced children are promoted rapidly and they are granted lifelong jobs without a performance evaluation. Institutionalization is not the bosses' knocking off, however, being a boss is a separate occupation and it should be learned well. The boss' duty is to point the top manager and control the institution directly and indirectly.

2.2 Reign

It emerges when the capital owner is also the administrative. In such a situation, the control agency, which should control the company efficiently, shows weakness and the decisions about the management of the company are taken in a monarchic system. That's why a company should never be surrendered to the ones that have a sense of reign. The boss should stop the 'one man' role and go towards a 'conductorship' role. Just as the most powerful reign regimes will collapse in the end, and such a collapse is inevitable for a company that is not open to an internal control competence.

2.3 High labour turnover rate

It is seen in the enterprises in which the organization scheme, duty explanations, authority and responsibility balance are not determined clearly. There is "we" and "they" segregation between employers and employees. Generally, they don't invest in human. As the owners of the companies assume themselves more experienced, informed and intelligent, they face difficulties in working with managers that exceed them. As they are sensitive to manufacturing and marketing rather than training, reports and all the components of the work,

they have difficulties in seeing the whole system. They don't dominate the company by overcoming this difficulty, and so they need to point a man from the family to the key units.

2.4 Specializing

It will increase the efficiency of the enterprises, as a result of determining specific standards and aims for management. The term 'specializing' is far from other requirements of a significant and professional administration in circumstances such as creating certain standards, realizing quality in management and as a result of this, the company can't provide a specialization and such requirements are practiced by close relatives or formal inheritors. The family owned companies should focus on points such as; creating efficient family politics, separating the inner functions, leaving the job to professionals when it's necessary, searching for newer opportunities and investments, expanding and developing the business in order to provide a specialization in management.

2.5 Lack of information

Most of the failures the companies experience are because of the decisions, which are not based on informing (Oktav et al., 1990). It's another problem that people managing the family owned companies; consider informing as a redundant cost. There are several effects that hinder the owners of the family enterprises from an informing process such as limited financial and administrative facilities as well as the managers' negative attitudes towards this matter and their being unaware of the priorities that will provided by an informing process in a competitive environment.

2.6 Maintaining the past habits that rise from the ranks

The firm culture of a family owned company is created by the family members' emotions, thoughts and culture. In general, it is seen that the mission and vision of the firm is under the influence of the owner family.

2.7 Staff and training problems

Facing difficulties in supplying a sufficient number of and qualified enough labour is notable for small enterprises in almost all sectors. Recently, small and medium-scale enterprises have been in a period, in which people believe in the necessity of qualified staff and human resources. Staff recruiting in Small and Medium Sized Enterprises is still based on very classical methods such as references, newspaper advertisements and recommendations. Although the training programmes developing staffs' knowledge, skills and experiences are costly, recruiting a wrong staff for a specific position may be much more costly.

2.8 Power struggle

It is emerged as a result of interest groups around the candidates for the boss in large companies. And at the same time, in family owned enterprises, this problem will rise when inter parental conflicts are reflected to the work. The professional administration existing in the company may instigate the power struggle insidiously by applying a 'divide and rule policy', in order to have power in the future. Therefore, some precautionary measures should be taken by providing suitable jobs for anyone and instituting them into the right positions in the firm.

3 INSTITUTIONALIZATION PROBLEMS

Institutionalization explains the adaptation process of an institution to the environment it locates and a progress that occurs in institutions over time. In other words, institutionalization

is managing a company in the direction of specific aims and goals, and within the framework of specific principles and values. These aims and goals are so strong and attractive; these principles and values are so firm and linking that the existing administrators of the company feel as if they are obliged to act appropriately. Because these decisions are not effected by the administrators' character and decisions. Furthermore, institutionalization is the process of being systematized and becoming a rule. We can talk about the institutionalization of a company only when its activities are systematized and practices are done in the framework of some specific rules.

The major mission of administrators in a company is to provide a harmony within the organisation. They should determine the prudential priorities of the organization through providing employees' attendance and they also try to make sure that all these priorities are understood by each staff. Otherwise, aim of the organization and the staff is differentiated. As a result of this, the expected fertility and participation will not be achieved. Firstly, in providing the intra-organizational harmony, it's essential to discuss the organisation's existing situation, determine its goals and the requirements that are necessary for achieving these goals. The institution should create the organisation schema; accelerate the working system and work flow; prepare work profiles, procedures, handbooks and instructions about the job; establish an effective reporting system; create work and performance evaluation systems through work studies and analysis; describe the missions and responsibilities and make them written by determining the authorities; make career plans; write any type of information and update so often in order to achieve its goals. In a broader sense, institutionalization is "a process in which, the enterprises have rules, procedures and particular standards rather than individuals". Enterprises include their own working procedures within this process, and as a result, they attain a distinctive identity. Consequently, institutionalization is a process and the basic function of an enterprise that want to continue its existence.

There are some duties, which are necessary for family owned companies' prospective success. They should fulfil the following duties in order to gain an institutional identity (İşseveroğlu, 2001):

➢ First of all, the family members should understand the difference between the concepts of "family" and "company" and provide a balance between them.
➢ It should not be forgotten that, personal fortune management and company management are different concepts.
➢ The administration should employ high quality employees and motivate them to the work through giving them freedom of fulfilling the duties successfully. Moreover, the family members should not consider them as "extraneous" but as a component of the team.
➢ The communication in both family and company should be realized accurately, mutually and intensively. At the same time, conflicts within the family shouldn't be reflected to the work.
➢ Enterprises should use long-term plans instead of short-term ones in order to get better profit.
➢ The administrative positions should be assigned for professionals.

4   MARKETING MANAGEMENT IN FAMILY-OWNED ENTERPRISES

Under current circumstances, it is not possible to be successful or achieve the determined aims for family owned enterprises through traditional management mentality. The globalizing markets, developing technology, social and political structure, legislation, suppliers,

customers, in short all environments the enterprise is in relation with are changing increasingly (Gülen, 2005). But the Small and Medium Sized Enterprises (SME) are not successful enough to keep up with rapid changes in consumers' preferences, which are emerged as a result of technological and socio-economic changes. However, in order to gain a competitive advantage, enterprises should improve production and management processes, increase output quality, provide a customer satisfaction as well as develop some new cost-reducing methods by increasing employees' content, motivation and performances. Marketing plays a central role in fulfilling such business aims and goals (Adu and Singh, 1998, p. 385). In Gillmore, Blankson, Morrison and Lee's studies, they consider marketing problem as one of the most important problems that threat existence of small enterprises. Through the small enterprises in Australia, there are some important problems; for instances, selling and marketing problems (40%), human resources (15%), general management (14%), and manufacturing related problems (9%). In the context of India, management union's survey of 872 SMEs show that, there occurred a 8,1% decline in production between 1998 and 2002 and undoubtedly, it was caused by marketing problems which was at the rate of 70% (Sengupta and Chattopadhyay, 2006, p. 329).

Negative characteristics of SMEs' related to marketing functions can be arranged like this (Tekin, 2009):
> Small and Medium Seize Enterprises do not have a separate marketing department that employs professionals.
> The dominant sense of marketing of SMEs is under-developed.
> They don't make regular marketing research.
> They depend on a limited and narrow market.

On the other hand, small enterprises have some priorities related to marketing:
> Direct marketing,
> Efficiency in personal customer relations,
> Lower selling costs,
> Carrying on business in simple and small markets,
> A high flexibility
> Capability of a rapid decision making,
> Possibility of mass customization production,
> Price, cost and quality options.

4.1 Selling and marketing

Marketing activities in family owned enterprises are determined by top managers' instincts, past experiences, performance and traditional habits. Furthermore, they are run as informal and unplanned activities (Sengupta et al., 2006). The selling orientation of small enterprises represents how a marketing line they have determined. All research companies define three types of sales personnel, within the scope of SMEs' selling orientation and selling literature. These are entrepreneur salesmen, ambitious (who want to make a career) salesmen and service-oriented salesmen. Although these three kinds are very important for companies separately, the entrepreneur salesmen type is the most predominant one. They are seen as the representatives of sale activities in enterprises (Hill, 2001). The observable aspect of marketing in Small and Medium Sized Enterprises is to conduct the strategic marketing decisions simply or to perform the marketing planning tactically. As Simon (1960) argues, decision making within SMEs is a whole, from routine schedules decisions to unscheduled, intuitional and unpredictable ones. But the unscheduled and intuitional decisions have the

features that are belong to SMEs (Simon, 1960). An entrepreneur salesman is a man, who is exaggerator, optimistic, high motivated, vision and intuition holder, creative and who has competence of taking a big responsibility. The entrepreneur personality definition in literature suits the entrepreneur salesmen characters. Jarillo (1988) and Gartner (1989) define the entrepreneur personality as a person who has a high motivation and creativity and also the ones who try to catch opportunities. Generally, the employees that conduct marketing activities In SMEs are the entrepreneur salesmen.

Point view, perception, behaviours and features of company owners or managers are conducted especially with considering the company's size (Gilmore et al, 2001; Carson, 1993). As professional salesmen, brand managers and researches can not be employed in small enterprises generally, the things that affect marketing activities of a small business are personal qualities, perception and especially the predecessor habits of the top manager. That is, the characteristics of SMEs' marketing may be derived from management style, independency, property, the possessed limited resources and scale and scope of activities as well as empirical knowledge of the administrators and the firms.

4.2   Customer relationship management

In developing competitive environment, it is now essential to present high-quality goods and services to customers regularly (Appiah and Satyendra, 1998, p. 385). Because, today's customers are people who get organized better, evaluate alternatives, demand more on subjects like goods and services, question and also who are knowledgeable and aware of their rights. Therefore, in order to meet the requests and needs of the customers that they have in their enterprises, and to prevent them from choosing other alternatives, they give more importance to customer relationship management (Lusch and Laczniak, 1987). Especially for SME, customer orientation is vital to achieve success. Because, generally these kinds of firms do not have enough financial power to develop research, to take competitive advantage, to be able to develop low-cost leadership and effective strategies, and to recruit qualified staff (Pelham and Wilsom, 1996). On the other hand, the peculiar culture and traditions of the family owned enterprises, mutual experiences of the family members in the past, communication, attitude, values and organizational culture provide an advantage to them in how to treat their customers (Uluyol, 2004; Fındıkçı, 2005). Customer accordance emphasizes organizational culture, forms wholeness and does not separate from each other. The information related to the needs of the customer should be considered with organizational culture, beliefs and values that the enterprise have. Having comparatively few employees leads to establish intimate and close relationships. Thus, the employees value their customers more. High motivation of the employees - who are also called internal customers - and their receiving good treatment enables the external customers to be pleased too. This type of informal relationship is quiet common in family owned enterprises. The mobility of small businesses is faster than the big businesses' (Asford and Towers, 2001). So, they can see changing customer demands, wishes and needs in the market beforehand and they can make adjustments suitable for the market and they can make swift decisions about change. A subject, on which it takes months to make a decision in a multinational corporation, can be determined in just one day in a family owned company (Ural, 2004, p. 10) However, the fact that there are not adequate and qualified sales and marketing staff in family owned enterprises, or the fact that customer relationship manager is dealing with other businesses at the same time can cause problems. Loss of customers, which can occur as a result of not being able to offer service to the customers after sale, is one of the disadvantages that family owned enterprises have (Tekin, 2009; p. 362). According to Levitt (1983), the relationship

between the purchaser and seller does not end when the sale is over. Later begins the after-sale service and the real relationship, discount, and privileges that are going to be presented to the customers start at this level. A kind of marriage begins. Relations marketing is already described as a process in which long-termed win-win relationships are developed together with customers, suppliers and distributors. In SME, this kind of sales approach should be adopted and thus they can change customer relationships into competitive power skillfully.

4.3   Pricing and advertising

The success of marketing activities that are carried out in family owned enterprises depend on marketing mix decisions. To know who is going to make this decision and which internal and external factors are effective in decision-making, and also to make environmental analysis are important in choosing the most appropriate marketing mix. It is important for marketing success to determine a suitable price for the features of the market that is being served and for the target group of that market (Tekin, 2009). High price may not be able to provide high sale revenue. There should be a balance between the quality level of the goods and services that are presented and the price. At this level, carrying out institutionalization and distribution of authority openly gains importance. While the founder of the company has prejudices against advertisement and promotional activity efforts, new generation thinks that these kinds of expenses are necessary. Similarly, also in pricing decisions, there can be seen intra-company disagreements. Because pricing affects customer behavior and purchasing decisions closely, it is considerably important. For this reason, pricing the value of goods or services shouldn't be seen as a simple process. The main factors of pricing decisions in enterprises are customers, rivals, costs and laws. All these factors should be regarded as a whole and while deciding on the price, they should be taken into consideration.

Advertisement also has an important place among marketing components. To prepare an advertisement program, to choose an appropriate means of advertising, to determine openly what is going to be told and whom it is going to be told are necessary for an effective advertisement. However, in order to do this, there should be advertisement and presentation department in family owned enterprise and what's more there should be professional advertisers as the head of that department. As it is always pointed out in this study, because the limited facilities of family owned enterprises is not convenient for this, the founder of the company is advertising executive, purchasing executive, public relations specialist and also accountant of the enterprise. At the same time, he is a quality-control specialist, a husband and a father. The fact that all these different functions come together in one person decreases the productivity and this makes it difficult to survive in constantly-changing conditions of market.

4.4   Distribution channels

Inadequacy of human resources in SME (Small and Medium Sized Enterprises) and difference in production systems also affect the type of distribution channel that is going to be chosen (Tekin, 2009). In small enterprises, workshop production is made. In order to satisfy the market demand, they generally make production to order. Since the activities done in small enterprises vary constantly, division of labor and specialization are not in advanced level. In SME, distribution is generally carried out by the efforts of private marketing. In such enterprises where personal selling gains importance, the entrepreneurial salesperson takes the distribution part on himself. Besides, he has the ability to take big responsibility and he is highly-motivated, optimistic, creative, visionary and intuitive. The definitions of entrepreneurial personality in literature also match the features of entrepreneurial salesperson.

Jarillo (1988) and Gartner (1989) define entrepreneurial personality as a highly-motivated person, an opportunity-seeker and a person full of creativity. In SME, generally an entrepreneurial salesperson carries out the marketing and distribution activities. In short, we can say that, generally a direct distribution channel without a mediator is preferred in small enterprises.

4.5 Staff and communication

Choosing the staff that is going to work for family owned enterprise is carried out by considering the kinship, friend recommendation, reliability and whether the person is a member of the family or not, rather than qualifications, education and experience (Uluyol, 2004). Therefore, there are not so many professional, expert, educated and experienced staff in family owned enterprises. Because, the limited financial resources that the family owned enterprises have, are inadequate in providing the wages that are demanded by the professionals. Business and family systems are quite different systems from each other. According to Rosenblatt et al., family and business have rules of their own. In this respect, running the company like a family can cause problems in the relationships between the employee and the administration (Cole, 2000). People who work for a company, without discrimination, should be regarded as a part of that company and everybody should be treated equally considering their knowledge, skills and contribution to the company. In family owned companies, generally feelings lead logic. In family owned companies, the entrepreneur's personality as a ruler is dominant. He prefers giving instructions rather than persuading. And for this reason, problems break out in correspondence and communications (Tekin, 2009).

The owner of a small enterprise should pass to democratic leadership from autocratic leadership. From now on, instead of enforcing his orders, like a ruler, to the employees working in his service; he should regard them as members of a team of which he is in charge. Instead of enforcing his demands, he should try persuading. He should leave aside the "I know the best" thought and let the employees express their opinions on some subjects too. He should encourage employees to reveal the innovative character within them (Dilbaz, 2005, p. 59). What should be done here is that everybody shares and discusses the ideas passing through their minds with others. If they can make decisions together, these ideas can be carried out and developed (Uluyol, 2004). Communication is one of the most important problems that family owned companies encounter today (Fleming, 1997). However, one of the success factors for a family owned company is the communication among family members and with the employees out of family. For an effective management, communication channels should be kept open and the flow of information should be enabled regularly. In family owned enterprises, staff and administration relationships have informal features. And this helps to build sincerity, confidence and close relationship between the employees and the management.

In family owned enterprises, there usually occurs a lack of communication among family members. Because of generation gap, family members may conflict with each other about the necessity of the strategies and activities that will be carried out in the enterprise. The subjects about which the fathers complain most are : sons are in too much of a hurry over taking responsibility, they want to change the old methods, they do not trust the experience and opinions of their fathers, and they want to change the aims of the company. And the subjects about which the sons complain most are : the founder of the company does not give enough authorization, he (the founder) has obsessions with doing business, he resists change and innovation, and fathers still regard them as a little boy. All of these result from different

perspectives and way of thinking of different generations. However, this kind of communication problems can be solved by organizing family gatherings and talking over the problems openly.

4.6 Production

Family owned companies, which struggle with financial problems, have also problems about the transfer and use of appropriate technology. Among the production problems of these enterprises we can mention technology, quality, stock, standardization, production planning, product development, purchasing, choosing workplace and raw material (Tekin, 2009). People encounter important problems particularly in purchasing part. When raw materials and auxiliary materials that are used in production do not come on time, this leads to delay in delivery of ordered goods and loss of customers. In family owned enterprises, the negative attitude of the boss-manager towards change and technology also prevents the production to be made in appropriate standards for the market. Innovation in SME, keeping up with industrial changes and level of acquiring different knowledge are all limited with the boss-manager's perspective and industrial experience (Wang, Wang and Horng, 2009). Contrary to big companies, the limited financial facilities and poor administration infrastructure in small enterprises make them stay behind the times in subjects such as producing innovation and making production with new technologies (Jones and Craven, 2000; Lim and Klobas, 2000). There is no opportunity for the goods, which are produced with old style and methods by companies which cannot keep up with technology, to compete with the goods produced of good quality and for less money by the rival companies working with the newest technology (Uluyol, 2004).

The facts that the production costs are high as a result of inadequate revision and calculation, the indifference of the administrators on this subject, and that they are still using the out of date accounting standards (Ural, 2004), that inadequate capacity decreases the productivity, the ambiguity of the quality level of the goods or services that are going to be produced, and lack of quality-consciousness are all among the problems of production (Tekin, 2009).

5 CONSLUSION AND SUGGESTIONS

Management and marketing problems that occur in family owned enterprises should be handled and solved with system approach and in management system as a whole. Therefore, all the family members should make self-sacrifice and have the thought and intention of providing the continuance of their business and enterprises.

Firstly, a company founder should have a mission and vision. He should be well-informed and experienced in business administration, and he should not only come up through the ranks but also be open to innovations and changes of the era.

Planning should be considered important in family owned enterprises and it should be prepared in accordance with scientific norms. In carrying out the plans, there should be full participation and support of the staff.

In family owned enterprises, formal communication should be considered important, and individual communication ways depending on blood relation should be ignored. In family owned enterprises, everybody should be openly informed about his own duty and responsibility. Company founders should give the staff authorization on some subjects. The employees of the enterprise should be highly-motivated, and they should be encouraged for

coming up with new ideas and solution offers. While recruiting staff for the enterprise, not the acquaintances, relatives or friends of the family, but well-educated, specialist and qualified staff should be recruited. What should be aimed is to increase the level of the wage that is paid to the staff and thus, to decrease labor turnover rate. Stock-control should be considered important, and stock cost should be minimized. The managers of the enterprise should take the stock, the use of capacity and the level of productivity into consideration while calculating production costs. Production costs should be on a level where they can compete with rivals in the market. Qualified staff should be recruited and quality level should be raised so as to create goods and service differentiation with the produced goods and services. While making production planning; market conditions, competition, and customer pleasure and expectations should be taken into consideration.

Here are some suggestions that are going to be made on marketing: In marketing team there should be knowledgeable and experienced people, distribution channels should be used effectively and thus it should enable the goods to reach the customer at the most suitable time, place and price. Customer relations should be considered important and customers should be satisfied. There should be conducted a detailed market research about the goods and services to market. And target customer group in the market and their features should be examined in a detailed way. Family owned enterprises should focus on advertisement and promotional work, and they should clear the way for new generation representatives on this subject. These kinds of promotional activities should not be regarded as unnecessary expenditure. It should be kept in mind that, the will contribute to the positive improvement of the enterprise's name and image. Personal selling should be considered important and for that activity, a qualified sales team should be formed.

The conflict that occurs in family owned enterprises should be prevented by constant meetings held by family members and again within family itself. Everybody should try to understand the other by establishing empathy and should avoid harmful ambition, rage and excessive passion. The problems within family should not be reflected to the enterprise, the aims of family and enterprise should be separated clearly.

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